



ESTABLISHED 1859.

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 BRANCH OFFICES: 231 ELIZABETH STREET, MELBOURNE,  
 VICTORIA, AND EMPIRE CHAMBERS, YORK STREET,  
 SYDNEY, N.S.W.

A weekly journal, supplied from the chief office in London to subscribers and persons connected with the trade only. Subscription, 10s. per year, payable in advance, including a copy of the DIARY next published, and postage to any country in the world. Single copies, 4d. each. Cheques and Postal Orders should be made payable to "EDWARD HALSE," and crossed "MARTIN'S BANK (LIMITED)."

AS AN OFFICIAL JOURNAL.

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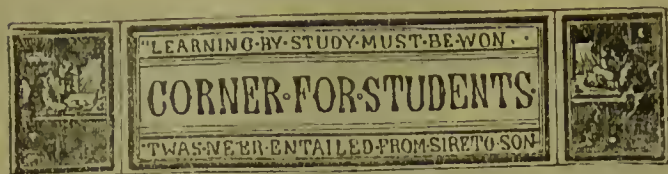
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CONDUCTED BY RICHARD J. MOSS, F.C.S., F.I.C.

#### QUALITATIVE ANALYSIS.

THE subject of the next exercise in qualitative analysis will be a mixture of not more than three salts. The mixture is to be submitted to a thorough systematic examination, all its constituents are to be detected, and proof is to be given that the substances detected are the only constituents.

Students' applications for portions of the mixture of salts (accompanied by a stamped and addressed envelope, not a stamp merely) will be received up to Wednesday, June 20, and the samples will be forwarded immediately. It should be understood that in this, as in all other competitions, THE CHEMIST AND DRUGGIST recognises no distinction of sex.

Students' reports will be received up to Saturday, June 30. Each report should contain a concise account of the work done, and should include a list of the constituents detected. In this list any substance regarded as an accidental impurity should be distinguished from the essential constituents of the salts of which the mixture is composed.

#### REPORTS.

The subject of the last exercise in qualitative analysis was a mixture of 2 parts of copper sulphate, 2 parts of antimony potassium tartrate, and 1 part of bismuth oxynitrate. Its calculated composition was:—

Sb	..	..	..	..	..	14.23
Cu	..	..	..	..	..	10.17
Bi	..	..	..	..	..	13.73
K	..	..	..	..	..	4.55
SO <sub>4</sub>	..	..	..	..	..	15.40
NO <sub>3</sub>	..	..	..	..	..	4.05
C <sub>4</sub> H <sub>4</sub> O <sub>6</sub>	..	..	..	..	..	17.26
O	..	..	..	..	..	2.90
H <sub>2</sub> O	..	..	..	..	..	17.71
						<u>100.00</u>

It contained traces of iron, calcium, and ammonium. The number of packets of the powder sent to correspondents was 59, and the number of reports received 35. The failures in the detection of the chief constituents of the mixture were:—Nitric radicle, 20; bismuth, 11; antimony, 9; tartaric radicle, 7; potassium, 6; sulphuric radicle, 1; copper, 0.

It required close observation to detect the slight evolution of the lower oxides of nitrogen, just perceptible by smell when the powder was heated in a tube. It was, therefore, necessary to rely almost entirely on a direct test for the detection of the nitric radicle in this mixture. In most cases any nitrate present in a mixture of salts is sure to be found in the aqueous extract of the mixture, and if no part is dissolved by water it is proof that a nitrate is not present. The present exercise affords an example of an exception to this rule, the basic nitrate of bismuth which it contained being insoluble in water, though it is more or less decomposed by water, some nitric acid passing into solution. When the powder was boiled with sodium carbonate the solution contained all the nitric acid, but it contained copper also, and for this reason it was not quite suited for the application of the ferrous-sulphate test. The copper remained in solution,

notwithstanding the boiling with sodium carbonate, because a tartrate was present. This non-precipitation of the copper was important to note, as it was evidence of the presence of one of those organic compounds, such as the tartrates or citrates, which produce this effect. A solution better suited for examination for the acidulous radicles was obtained by precipitating the heavy metals as sulphides; in fact, a portion of the solution through which sulphuretted hydrogen had been passed in the regular course of the examination for the metals was just in the proper condition for the detection of the acids, after the excess of sulphuretted hydrogen had been expelled. The ferrous-sulphide test for the nitric radicle cannot be successfully applied without a careful practical study of the reaction; the conditions to be observed cannot be learnt in any other way.

Bismuth was present in sufficient quantity to admit of easy detection. The brittle metallic beads obtained by fusing some of the powder with sodium carbonate on charcoal consisted almost entirely of bismuth. They dissolved readily in nitric acid, and the solution gave a white precipitate on the addition of water. The detection of bismuth in the sulphides thrown down by sulphuretted hydrogen was not attended with any difficulty.

Antimony sulphide was separated from the other sulphides by the action of a solvent. Some of our correspondents used ammonium sulphide for this purpose, and when they added an acid to the solution a brownish-coloured precipitate was obtained. From its colour some seem to have concluded that it consisted of tin sulphide, but in this case the colour could not be relied upon. Copper sulphide is slightly soluble in ammonium sulphide, and it was the trace of copper present as sulphide which gave the precipitate the brownish colour. By using sodium sulphide as the solvent antimony sulphide was obtained free from this impurity, and with the bright orange-red colour which characterises it.

#### PRIZES.

The First Prize for the best analysis has been awarded to ARTHUR M. THORPE, c/o Mr. E. W. Bell, Spalding, Lincs.

The Second Prize has been awarded to W. H. WAIND, 23 Cromwell Road, South Kensington.

#### MARKS AWARDED FOR ANALYSES.

A. M. Thorpe (1st prize)	..	98	P. Harris	..	..	80
W. H. Waind	..	96	Didymus	..	..	80
H. Read	..	95	Victory	..	..	77
L. d'E. L.	..	94	Bête Noire	..	..	75
H. Bridges	..	94	Cono	..	..	72
Vigovina	..	93	Campanulate	..	..	70
Crystal	..	92	Cleveland	..	..	60
B. O. W.	..	92	Kalium	..	..	55
Olicana	..	91	Nil Desperandum	..	..	50
Civilian	..	90	Hopeful	..	..	45
Timothy	..	89	Dewsburnian	..	..	42
A. W. Jones	..	88	Cambria	..	..	40
Aristocrat	..	88	Aluminium	..	..	38
Tabloids	..	87	Vectis	..	..	30
F. H. Moore	..	86	W. Blakeley	..	..	15
S. Riley	..	85	Hopeful Secundus	..	..	10
G. D. Roberts	..	83	D. W. C.	..	..	10
Chelt	..	82				

#### TO CORRESPONDENTS.

*Prizes.*—The students to whom prizes are awarded are requested to write at once to the Publisher, naming the book they select, and stating how they wish it forwarded.

Any scientific book that is published at a price not greatly exceeding half a guinea may be taken as a first prize.

Any scientific book which is sold for about five shillings may be taken as second prize.

*Note.*—All communications should include the names and addresses of the writers.

VIGOVINA. Your work is evidently carefully done, but your report is not prepared with sufficient care. You should aim at thoroughness.



**CIVILIAN.** In following the course you adopted there is some risk of overlooking a small quantity of nitrate. It is better to apply the general test with ferrous sulphate for both nitrate and nitrite first; if the result is negative a search for nitrites is not necessary.

**TIMOTHY.**—A sodium-carbonate solution, prepared in the usual way, gave a well-marked brown ring on applying the ferrous-sulphate test for nitric acid.

**A. W. JONES.**—The ferrous-sulphate test for nitric acid requires careful manipulation. You should try a series of experiments to find out what is the smallest quantity you can detect.

**TABLOIDS.**—There was more than a burnt-sugar odour noticeable when the powder was heated; a nitrous odour was also distinctly perceptible.

**F. H. MOORE.**—Your examination for the acids was very superficial. Your work should be much more exhaustive.

**S. RILEY.**—You should have submitted the powder to a preliminary examination in the dry way before proceeding with the analysis of a solution. Even if the preliminary examination is confined to the effects of heat upon the substances the experiment will be found, if closely observed, to convey a great deal of information.

**G. D. ROBERTS.**—You omitted to apply any test for nitric acid.

**CUELL.**—You disposed of the acids far too hastily; they were deserving of more consideration.

**P. HARRIS.**—Though there was not much potassium present it was easily detected, as it was the only metallic constituent in solution after treatment with sulphuretted hydrogen.

**DIDYMUS.**—The silver precipitate you observed as soluble in ammonia was soluble also in nitric acid, so it could not have been silver chloride. You did not make any attempt to detect the nitrate.

**VICTORY.**—You omitted to explain how lead could be present in a mixture of salts readily soluble in hydrochloric acid and containing a sulphate in abundance.

**BETE NOIRE.**—In describing your test for nitric acid you say you added a drop of sulphuric acid to the solution in which you had dissolved the ferrous sulphate. The result was, of course, negative. The strong acid should be added in sufficient quantity to more than fill the hemispherical bottom of the test-tube. It is a good plan to use a pipette for adding the sulphuric acid; it prevents an undue admixture of the acid with the solution.

**CONO.**—The beads you observed consisted of bismuth, not lead; their extreme brittleness showed they were not lead, and when dissolved in nitric acid the solution gave a white precipitate on dilution with water. See remarks to "Victory."

**CAMPANULATE.**—If you failed to obtain a precipitate on adding ammonia to the nitric-acid solution of the sulphides, it must have been because you did not add an excess of the reagent. The quantity of bismuth present was by no means small.

**CLEVELAND.**—You should prepare a similar mixture, and repeat the work: you will find that the reactions so conclusively pointing to the presence of lead were quite imaginary.

**KALLUM.**—The brittleness of the metallic beads you obtained ought to have suggested bismuth. Yellow ammonium sulphide dissolved the antimony sulphide readily with a trace of the copper sulphide.

**NIL DESPERANDEM.**—You omitted the preliminary examination in the dry way altogether. See remarks to S. Riley.

**HOPEFUL.**—In applying the ferrous-sulphate test for nitric acid you warmed the solution: you should, on the contrary, have cooled it. The brown ring is due to a very unstable compound of nitric oxide and ferrous sulphate.

**DEWBURIAN.**—You found that the powder was soluble in hydrochloric acid, and that it contained a sulphate, therefore barium could not have been present.

**CAMBRIA.**—The fumes which you mistook for acetic acid were due to nitric acid. You should not have overlooked the burnt-sugar smell.

**ALUMINUM.**—When you passed the gas from the hydrogen apparatus through silver nitrate you obtained a precipitate which you say consisted of metallic silver, but you did not prove the statement. If the precipitate had been caused by arseniuretted hydrogen, you ought to have been able to show that the solution contained arsenic. The precipitate really consisted of silver antimonide, and was much darker in colour than metallic silver.

**VECTIS.**—According to your report, the only thing you did with the ammonium sulphide with which the precipitated sulphides had been treated was to add mercuric chloride to it; and as you say no precipitate was produced, there must have been something very much astray, for, of course, mercuric sulphide ought to have been formed. You should have added an excess of dilute hydrochloric acid to the ammonium-sulphide solution, to separate any sulphide it had dissolved.

**HOPEFUL SECUNDUS.**—You gave no proof of your statement that the beads were metallic tin. See remarks to "Kallum." You did not look for nitric acid, and made no attempt to account for the organic matter you detected.

**D. W. C.**—No extra marks are given for equations.

**MIKE:** "They does be afther tellin' me at the dispensary that I has insomnia, Biddy." Biddy: "Thin why don't yez be afther goin' to bed an' slapin' it off?"

## English News.

*The Editor is obliged to correspondents who send local newspapers containing items of interest to the trade. He will be further obliged if such paragraphs be marked in all cases.*

### Mr. Braxton Hicks and the Chemist.

Mr. Braxton Hicks held an inquest at Lambeth on June 6, regarding the death of an old man of 79. A witness stated that he wanted a "Dr." Pearson, of 102 Stamford Street, called in. "'Dr.' Pearson," said the Coroner, when a witness explained this, "why, he is the registrar of births and deaths, and keeps a chemist's shop. It is not the first time I have heard of this sort of thing. Did you think he was a doctor?" The Witness: Yes, sir: I saw him sitting in a chair, and I called him "doctor," and told him that an old gentleman was queer. He said he could not attend, as he had a bad leg. The Coroner: Ah, he has had a bad foot since I reported him to the Registrar-General. I have complained to the Registrar-General of the way in which Mr. Pearson acts. I only want people to know that he is not a doctor. A Juryman: I have lived in the district ten years, and always thought Mr. Pearson was a doctor. Mrs. Capper, the widow, said she thought she would get a doctor who used to "act" for the chemist. The Coroner (to the Jury): That is a nice state of things, gentlemen. The suggestion that occurs to my mind is that the chemist was "covered" by a medical man. I do not say it is so, but if such a thing occurred, and it was brought to the notice of the Medical Council, it would be regarded as infamous conduct. Dr. Nichol Henry stated that death was due to double pneumonia and a fatty heart. A verdict was given accordingly.

### A Dodging-machine.

There has been a correspondence in a Dundee morning paper regarding druggists' profits. The ordinary statements have been trotted out, but one "Viropers" has succeeded in saying something that is "by-ordinar." He considers that "druggist's profits are smaller in proportion than those of any other tradesmen. This to a large extent arises from the semi-professional, semi-commercial, position which they occupy. No class of men are persecuted by the laws of the nation to the same extent as druggists are. They are hedged around by an environment of senseless laws and rapacious customers that dam the pharmaceutical progress of the age, and turn the energy of the chemist and druggist into a patent dodging-machine, which environment is having its effect in leaving our pharmacists lagging behind those of other nations."

### He is Enterprising.

They are telling a story in Birmingham just now of a chemist who recently, with his family, attended a picnic, and after tea he distributed among the company packets of sweetmeats, all of which bore an advertisement referring to his specialities. Later, during a concert which followed, his daughter sang a song the words of which set forth the advantages which could be derived from the use of certain pills, the application of a well-known plaster, or daily doses of Blank's tonic.

### Lanoline Inspection.

Messrs. Holman, Ham & Co., of Exeter, had a lively half-hour a week ago. Some members of a flock of sheep, which was passing, bethinking themselves of the growing interest of their fraternity in pharmacy, walked into the dispensing-department in the hope of studying the relative merits of lard and lanoline. But as the whole of the flock appeared to be imbued with the same desire, the more "brainy" ones found considerable difficulty in pursuing their studies, and they departed with the idea of visiting pharmacy again in less evanescent form.

### Ptomaine-poisoning.

On Saturday last a woman at Neath gave some green cheese, more or less decomposed, to three children, aged from four to six years. They shortly afterwards showed signs of



ptomaine-poisoning. Various antidotes were administered, and all the children recovered.

#### Cashing a Cheque.

Mr. J. H. Read, chemist, Buckingham Palace Road, S.W., gave evidence in a charge preferred at Westminster Police Court on Saturday against Ponsonby Dalrymple, *alias* Charles Moreno, described as a highly-connected young gentleman who was equerry to the Prince of Looz and Corswarem. Mr. Dalrymple was alleged to have obtained money from various persons by false and fraudulent pretences. Mr. Read deposed that in May last year the prisoner, whom he had known as a customer, induced him to give value for a cheque for 12*l.*, which was returned dishonoured. It was shown that the prisoner did have an account at the Pall Mall branch of the London Joint-stock Bank, but at the time he obtained money from Mr. Read his credit balance was under 3*l.* There were numerous other cases of fraud against the prisoner—some of them relating to very large amounts—and he was wanted on a warrant for false cheques at Tunbridge Wells. Defendant's solicitor, in applying for bail, said Mr. Dalrymple was highly connected, and a member of a well-known family. He was a young gentleman only recently of age, and, like many other young men, he had foolishly incurred expenses which for the time he could not meet. If he were allowed out on bail it was likely that all the cheques would be met, for the defendant had wealthy friends. Mr. de Rutzen remanded the case and refused bail.

#### An Æsthetic Town Council.

At a meeting of the Scarborough Town Council on June 11 a minute was passed to the effect that it be a recommendation to the Pleasure-boats and Bathing Committee that they do take into their consideration the question of the advisability of prohibiting any advertisement on the sails of pleasure-boats and on the exterior of bathing-machines. The Corporation are by a local Act invested with full powers in the matter of street and other outside advertising. The sails of the Scarborough boats have so far escaped the grasp of the advertiser, but the bathing-machines have long been used for advertising purposes.

#### Who is to Pay for Broken Bottles?

An interesting point was settled by the Judge of the Petty Debts Courts in Jersey last week, when Mr. George Cole, chemist, of King Street, sued the Cæsarean Club for an account for aerated waters supplied. The matter in dispute was about a number of syphons and bottles which were missing, having been either broken or lost, and for which payment was claimed by the plaintiff. The defendants argued that it was not customary in the trade to charge for breakages, &c., which, they contended, might be due to over-charging at the manufactory. Judge Vaudin decided that the club must be held liable, adding that when a bottle accidentally exploded immediate notice should be sent to the maker of the waters. He advised settling the matter of payment out of court. The plaintiff agreed, and expressed himself satisfied with the Judge's ruling on the point of responsibility for broken or missing bottles.

#### Drug-contract.

The Milton (Sittingbourne, Kent) Board of Guardians at their last meeting accepted the tender of Mr. French, chemist and druggist, Sittingbourne, for the supply of chemists' goods to the workhouse.

#### Laying Poison.

The Shrewsbury Magistrates fined a woman, named Dolman, on June 9, 10*s.* for laying poisoned meat in the yard of her house with the object of killing cats.

On June 9 a boy named Purdy, residing at Tilbury (Essex), picked up in the road what he thought to be a cake and ate it. He was taken ill, and died soon after. Another boy who partook of the poison recovered. A portion of the poison which had been cast away was recovered, and was found to be rat-poison cake.

#### The Half-holiday.

The chemists of Heywood, near Rochdale, have commenced to close their pharmacies every Tuesday from 1 P.M.

until the following morning, up to the beginning of next September. Hitherto they have closed at noon on Tuesdays and reopened in the evening.

The chemists and druggists of Holt have agreed to close their places of business each Thursday at 2 P.M. instead of at 5 P.M. as heretofore. At Appleby and Carlisle the chemists have fallen in with a proposal to suspend business at 1 P.M. each Thursday afternoon. Mr. A. Higgs, chemist and druggist, Richmond Road, Kingston, was the only chemist in that town who closed his shop at 2 P.M. on Wednesday of last week, when the half-holiday was inaugurated generally. At Chatham, Gainsborough, and Swindon efforts are being made to induce the chemists and other tradesmen to adopt the early-closing movement.

#### Fined for Inebriety.

Joseph Philp, chemist and druggist, Paddock Wood (Kent), appeared at the County Petty Sessions on June 7, charged with drunkenness on May 26. Mr. A. H. Neve defended. The evidence for the prosecution was to the effect that defendant was drunk, and made a complaint about gambling going on in the house, which was untrue. The Bench imposed a fine of 10*s.* and 38*s.* 8*d.* costs.

#### Administering the Sale of Food and Drugs Act.

It transpired at a meeting of the Finance Committee of the Glamorgan County Council on Tuesday last that the appeals under the Sale of Food and Drugs Act had cost the county 1,000*l.*, owing, so the Chairman said, to "the Judge's bad law." This was exclusive of 380*l.* which the county had to pay to Mr. W. E. R. Allen as prosecuting solicitor.

#### Carbolic Poisonings.

Margaret Cullen (27), the wife of a coach-painter, named William Cullen, living at 4 Walker Street, Liverpool, had been separated from her husband for some time owing to her drunken habits. She went to Liverpool last week from Manchester, and commenced drinking heavily. On Saturday morning she was found lying face downwards on the floor quite dead. A bottle labelled "Carbolic—poison" was standing on the table, and a cup which smelt strongly of the same poison was found in the back kitchen. Mr. Jordan, chemist and druggist, whose name appeared on the label of the bottle, sold deceased a pennyworth of carbolic acid. She said she required it "to kill bugs." The medical evidence showed that carbolic-acid poisoning caused her death.

On Friday morning last week, a man named George Taylor Stamp (52), residing in Tenter Terrace, Durham, took a quantity of carbolic acid. He was discovered in the back yard, and medical assistance was quickly obtained. Stamp, however, died during the afternoon. He had been out of employment for some time.

A man named Michael S. Horst, aged 33 years, residing at Park Avenue, Longsight, was discovered dead in his house on Monday last week. He had lately been drinking very heavily, and his mind appears to have become unhinged. He had taken a fatal dose of carbolic acid.

Late on Monday night a female servant, about 20 years of age, employed at the Ideal Club, Tottenham Court Road, was found to have swallowed a quantity of carbolic acid. The young woman was conveyed to University Hospital, where she shortly afterwards died in great agony. The deceased had recently seemed very depressed.

Henry Simons, aged 68, of 17 Sykes Street, Leeds, was living apart from his wife, and was allowed 5*s.* a week by his brother. He complained that this was not enough for his needs. On the arrival of a train from Leeds at Saltley on Wednesday afternoon last week, Simons was found to have poisoned himself with carbolic acid in one of the carriages. He died in the hospital shortly afterwards.

Thomas Ward, formerly in the employ of the Mersey Docks and Harbour Board, Liverpool, was on Monday found dead in his house in Geneva Road, Seacombe. He had evidently taken carbolic acid.

#### Inquest on a Chemist.

On Wednesday, last week, an inquest was held at Tipton, touching the death of Benjamin Colley (43), chemist and



druggist, Owen Street, Tipton. The widow of the deceased stated that her husband had been ill for the last eight months, and had been attended by Dr. Brown, of Tipton. Some time ago he suffered from insomnia, and took narcotics. Dr. Brown advised him to discontinue taking the drugs. She therefore refused to make up any more prescriptions for him. She had frequently made up prescriptions for him in his presence, bromide of potash being one of the things he had taken. Dr. Brown said deceased had been suffering from a diseased liver, brought about by alcoholic absorption. Eight months ago he treated the deceased for delirium tremens, and at times the man had a great craving for drink. A verdict of death from natural causes, accelerated by excessive drinking, was returned.

#### A Rent-dispute.

At the Lincoln County Court, on June 11, John Scoley Battle, Frederick George Battle, and Wm. Bayles, executors of the late Mr. John R. Battle, Lincoln, sued F. Barlow, a chemist, late of Bassingham, for 7*l.* 10*s.*, half-year's rent of a house and shop situate at Bassingham. The defendant put in a counter-claim for 13*l.* 10*s.*, which he alleged was due for fixtures and tenant-right on quitting the premises. Plaintiffs' case was that the late Mr. Battle was the owner of the property, and Mr. Reynolds was the tenant. The defendant succeeded Mr. Reynolds in the tenancy, and the trustee under the will of the late Mr. Reynolds negotiated the transfer of the fixtures to Mr. Barlow. The total sum paid was 3*l.*, and Barlow had had the use of the things for some time. It was unreasonable to suppose that the value had increased. His Honour gave a verdict for plaintiffs for the claim, 7*l.* 10*s.*, and on the counter-claim, with costs.

#### Disinfectants in Holborn.

At the meeting of the Holborn Board of Works on Monday night—Mr. G. Phillips in the chair—the Medical Officer of Health (Dr. S. Gibbon) reported that the only carbolic powder in stock was 4 cwt., which on analysis was found to contain only 3 per cent. instead of 15 per cent. of available carbolic acid, and which was little better than chalk. It was impossible to destroy infection with it, and he therefore recommended the committee to at once order further supplies of pale carbolic-acid fluid and carbolic powder. Dr. Gibbon added that disinfectants were immediately required, as infection had broken out in the district. They would be running great risks if they delayed giving the order. Mr. Migotti observed that the contractor stated they had kept the powder too long in stock, and its strength had evaporated. On the motion of Mr. Alderman Hoare, L.C.C., the report of the Medical Officer was referred to the Sanitary Committee, and he was directed to order what disinfectants might be required until they met.

#### Chemists at Cricket.

On Wednesday, June 13, a match was played at Paddington Recreation Ground—the City School of Chemistry and Pharmacy *v.* the Central School of Pharmacy. The scores were:—The City School, 71 runs; the Central School, 49.

## Scotch News.

#### Edinburgh Chemists', Assistants', and Apprentices' Association.

The second botanical excursion took place on Wednesday, June 6, to Arthur's Seat, starting from Holyrood Gate at 6 A.M. The party walked by St. Anthony's Chapel, over the Crow Hill, round by Dunsapie Loch, and home by the Gibbet Loan and Newington. Among the specimens collected were *Astragalus hypoglottis*, *Geranium sanguineum*, *G. molle*, *Helianthemum vulgare*, *Potentilla Tormentilla*, *Ranunculus bulbosus*, and *Thymus serpyllum*. *Sambucus nigra* was not yet in flower, but was covered with numerous flower-buds. *Ulex europaeus* was one mass of yellow bloom, showing the same rich profusion of flowers that is so marked a feature in all flowering trees and shrubs this season.

#### Alleged Slander.

The First Division of the Court of Session on Tuesday disposed of an action in which the Milton Chemical Company, 90 Cowliars Road, Glasgow, and William Mills, the sole partner of the firm, sued D. McDougall, general goods-manager of the North British Railway Company, Glasgow, for payment of 1,000*l.*, damages for alleged slander. The slander was said to be contained in a letter, dated October 9, 1893, signed by a clerk in the employment of the North British Railway Company on behalf of the defendant. In that letter the plaintiff's company was referred to as a "bankrupt firm." The statement, it was explained, was untrue, and was said to have damaged the credit of the Milton Chemical Company. The defendant said the letter was not written by him or with his knowledge or authority; that he was absent in England for several weeks about the time when it was written, and he did not know that any such letter had been written until the summons was served upon him. The letter was written by a clerk under a misapprehension, and the writer regretted the mistake, and was willing to apologise therefor. It was admitted that the Milton Chemical Company were not bankrupt at the date of the letter, and were not bankrupt now. In the Outer House Lord Kincairney dismissed the action as irrelevant. The plaintiffs appealed, and on Tuesday the Division adhered to the judgment of the Lord Ordinary, with expenses, holding that as it was not said that the letter in question had been written on the instructions of the defendant, and as it could not be affirmed that the head of a department in a railway company was responsible for the acts of the subordinate servants of the company in that department, the action was not relevant.

#### A Small-pox Epidemic.

Edinburgh and Leith chemists are at present unusually busy. For some months past small-pox has been prevalent in Leith, and latterly it has become more so, and has also spread to several districts in Edinburgh. Vaccination has been resorted to on a wholesale scale, and the consequent demand for lymph has been so great that it has been hardly possible to meet it. All kinds of vaccination-shields, including many which had been regarded as bad stock, have been disposed of, and sometimes, it is stated, at a premium. As an indication that to some people the operation of vaccination is no trifling matter, it may be mentioned that a few days ago a doctor in the Murchiston district was waited upon by a young man, who stated that he wished to be vaccinated, and that he would like to be put under chloroform.

#### SOME POPULAR SOAPS.

BY CHARLES M. BLADES, F.C.S.

IN these days of keen competition, when advertisements are rife amongst us and are often more or less misleading to the public, every man advertising his own manufacture as the best, I think the following facts may prove interesting to your readers. Seeing an announcement of 500*l.* being offered by a soap-manufacturer to anyone who could find a soap containing more actual soap than that known as "Perfection," I had the curiosity to test this and various other popular makes of soap now before the public.

The result of, to me, not uninteresting work done in leisure hours is as follows:—

Name of Soap	Water	Alkali	Free Alkali	Free Fat	Free Acids	
Matchless .. ..	27.03	8.37	.0167	none	64.60	100
Venus .. ..	25.55	8.63	.0173	none	65.77	100
Sunlight .. ..	26.22	8.99	.0176	none	64.79	100
Perfection .. ..	15.02	9.05	.0161	none	75.93	100
Titan .. ..	33.24	7.13	.0148	none	59.63	100
Magical .. ..	23.44	9.07	.0116	.052	67.44	100



## Pharmaceutical Society of Ireland.

THE monthly meeting of the Council was held on Wednesday, June 6, at No. 67 Lower Mount Street, Dublin, the Society's House. Mr. William Hayes (President) occupied the chair, and the other members present were the Vice-President, Mr. Beggs, and Messrs. Grindley, Wells, Conyngham, Baxter, J. J. Bernard, and Charles Evans.

### THE NEW EXAMINER.

A letter was received from the Privy Council (Ireland) approving of the appointment of Mr. A. L. Doran as an examiner.

### BRITISH STUDENTS AND IRISH EXAMINATIONS.

A letter was read from Mr. W. Dunstan, professor of chemistry, and dean of the school of the Pharmaceutical Society of Great Britain, stating that some of the students in that school were desirous of presenting themselves at the Licence examination of the Pharmaceutical Society of Ireland, and requesting that the school of the English Society should be placed on the list of educational institutions recognised by the Council of the Irish Society.

The REGISTRAR (Mr. Ferrall) mentioned that, in reply to a letter of his, a second letter had been received from Mr. Dunstan, stating that he understood it was obligatory upon candidates for the licence of the Irish Society to present certificates of having attended courses in practical chemistry and materia medica.

The PRESIDENT said they were all aware that the school of the Pharmaceutical Society in England was, as regards its arrangements for the teaching of chemistry, botany, and materia medica, everything that could be desired; and, therefore, he thought the request should be acceded to without the usual course of having the school inspected and reported upon.

Mr. BERNARD said he thought the reply to the request should be that the Council were willing to accede to it provided the English Society reciprocated. If English students were to be allowed to compete with Irish students, the Council should secure for their own men a corresponding privilege in England.

The PRESIDENT: That may be done, but certainly in a different way from what you suggest.

Mr. WELLS: I don't like the hartering system.

Mr. CONYNHAM: I don't think there is any business before us except to grant the request.

Mr. BAXTER moved that the request of the Pharmaceutical Society of Great Britain be granted.

Mr. CONYNHAM seconded the motion, which was put from the chair, and carried.

### MR. BERNARD ON THE ENGLISH.

Mr. BERNARD asked whether the matter just discussed had been put on the paper in consequence of any understanding between the English Society and any members of the Council.

The PRESIDENT: None whatever.

Mr. WELLS said he had visited the schools of the English Society, and so had Mr. Baxter, the Vice-President, Mr. Grindley, and others, and that was the reason why the usual course of requiring an inspection of schools before recognising them had been departed from.

The PRESIDENT: I was through them some time ago, and was delighted with them. This might be the right time to mention (he continued) that, as President of the Society, he was invited to the annual dinner of the Pharmaceutical Society in London, and went; and the kindly feeling shown towards them by the President and members of the English Society was more than he could have expected, having regard to the separation of the two countries by sea, and many other circumstances, and the severance of the two Societies by Act of Parliament. They sympathised with the Irish Society in every way, and took a deep interest in the work carried on here; and he hoped they would see their way to unite with them in assisting them to complete the work which they are carrying on so energetically in England. The more the members of the two Societies came into contact with each other, the more that kindly feeling was experienced.

Mr. WELLS said that whenever he attended the conferences he experienced nothing but the kindest feeling from the members of the English Society.

Mr. BERNARD said these remarks about kindly feeling had nothing to do with what he was contending for. An Englishman was always exceedingly nice when he wanted to do business. The Council had no right to give away the rights of their students without getting something in return.

The PRESIDENT: I don't think we are giving away the rights of our students.

Mr. BERNARD: I heard Mr. Wells say that our list of schools was closed.

Mr. WELLS: That is a mistake. I advocated adding to our list of schools, and was beaten.

### ANOTHER SCHOOL WANTS RECOGNITION.

A letter was read from Mr. Robert Barklie, F.C.S., asking that certificates should be accepted from the botany and materia medica schools of the Working Men's Institute, Belfast. The writer stated that the chemistry department of the Institute had already been recognised.

On the motion of Mr. EVANS, seconded by Mr. WELLS, the application of Mr. Barklie was referred to the Belfast members of the Law Committee for a report, and Mr. Payne was requested to visit the Institute schools with the members of the committee.

### DATES OF EXAMINATIONS.

The PRESIDENT said that at the last meeting of the Council, on the motion of Mr. Downes, it was resolved to hold the Society's examinations in future in the second instead of the first week of each quarter. The Law Committee, to whom the resolution was referred, had since made the following arrangements:—The examination for the Licence would be held on the second Wednesdays and following days of January, April, July, and October; the examination for the Registered Druggist's licence on the second Tuesdays of the months mentioned, or on such other dates as the Council should deem necessary, and in the event of twelve candidates applying from any place, an examination should be held in that place on such date as the Council should direct; and the Pharmaceutical Chemists' Assistants' examination would be held on the second Mondays of the months mentioned, or on such other dates as the Council should direct.

Mr. WELLS, in the absence of Mr. Downes, moved the adoption of an amendment to Regulation VII., which prescribes the minimum pass marks in pharmacy, botany, materia medica, and chemistry, for the Licence, and then proceeds:—"But it is clearly understood that they (the examiners) shall have in conference and jointly a discretionary power to pass a candidate whose general information and intelligence appear to justify such a course, though he may not in some one subject have attained to the standard laid down." He (Mr. Wells) moved that to these words the following be added:—"Provided that it be distinctly understood that no candidate shall be passed who has failed to obtain the minimum number of marks in pharmacy."

Mr. GRINDLEY seconded the motion, which was unanimously agreed to.

### AGE FOR THE PRELIMINARY.

Mr. WELLS moved that the regulation relating to the Preliminary examination be amended by altering the age at which candidates should be admissible to it from sixteen to fourteen years. Many pharmacists objected to taking apprentices who had not passed the Preliminary examination. There was no limit of age for students in the College of Surgeons.

Mr. CONYNHAM seconded the motion.

Mr. CHARLES EVANS: Why not leave out the limitation as to age altogether?

The suggestion of Mr. Evans was adopted.

On the motion of Mr. WELLS, the following gentlemen were

### NOMINATED FOR MEMBERSHIP

of the Society:—Mr. James Guiber, Belfast; Mr. Samuel J. Smith, Dublin; Mr. H. Scott, and Mr. Gerald McGuire, Dingle.

After some routine business, the Council adjourned.

The Preliminary examination will be held on Monday, July 2. The last day of entrance will be Monday, June 25.



## French Pharmaceutical News.

(From our Paris Correspondent.)

**CHLORINE AND BROMINE.**—M. K. Engel, professor of chemistry at the *Conservatoire des Arts et Métiers* has recently experimented with chlorine and bromine from an analytical point of view. He has succeeded in separating the two elements by means of persulphate of ammonia. This latter salt was discovered a few years ago by M. Berthelot, who has now congratulated M. Engel on his discovery, "which is the more important," he says, "as it was foreseen by thermo-chemistry."

**A CHEMICAL STRIKE.**—The hands at the chemical-works known as the Lyons Colour-works have been on strike since June 6. They ask for increased wages, and make certain demands for a change in the management. Through the intervention of the local deputy, Dr. Masson, a settlement has been made, by which an increase of wages has been granted, though not to the extent originally asked for by the workers. The latter consent, however, to one of the chemists, M. Rosenœche, and M. Rosicky, the general manager, who were objectionable to the bands, retaining their posts.

**SCENT AND SONG.**—The injurious effect of fragrant odours upon the voice is (according to M. Joal) well known amongst singers. Apparently violets are the greatest offenders, while roses have no injurious influence. There is no doubt that some people find certain perfumes noxious, and it is said that Madame Richard, of the Paris Grand Opera, forbids her pupils to wear violets. M. Joal recommends cocaine in spray-form as a preventive for the deleterious action of the perfumes of flowers on the throat, being of opinion that scents are capable of modifying the tone of the voice, by making it more difficult to take high notes, or by producing hoarseness.

**NEW ALKALOIDS.**—Several years ago, M. Grimaux, professor of chemistry at the Ecole Polytechnique, demonstrated that the alkaloid cupreine, obtained from cuprea bark, can be transformed into quinine and alkaloids analogous to quinine, such as quinethyline and quinopropylene. In a paper read before the Paris Academy of Sciences on June 11, M. Grimaux relates his experiences of the physiological and therapeutical effects of these new alkaloids. He concludes that they are more active than quinine; that quinethyline is a powerful febrifuge which arrests fevers against which quinine has no effect. As regards quinopropylene, it possesses a pronounced antithermic action, and appears likely to be of use in intermittent fevers.

**ACCIDENTAL POISONING.**—The following is reported from Auxerre:—Twenty-eight inhabitants of a neighbouring village called Toucy have been on the point of dying from accidental poisoning. A milkman named Pommeau, supplied milk to a certain number of families at Toucy, but as he lived some distance away the milk frequently turned sour while being carried, especially in summer. Pommeau then obtained some bicarbonate of soda, the vendor indicating the quantity to be used per litre of milk. The next day all Pommeau's customers were attacked with terrible sufferings in the bowels, and the milk was found to contain strong traces of arsenic. Further inquiry showed that arsenic had been supplied instead of bicarbonate of soda. Fortunately no case has ended fatally.

**METHYLPHLOROGLUCINE AND CREOSOTE.**—By causing chloride of aluminium to react on chloride of butyryl, M. A. Combes has obtained a compound,  $C_{12}H_{18}O_3$ , which he terms "triethylphloroglucine," and to which he called attention at the Academy of Sciences on Monday. The action of potash on this compound transforms it into butyrene and butyric acid, with liberation of carbonic acid. On the same occasion MM. Béhal and Choey gave their experiences with the analysis of creosotes extracted from tar obtained from beech and oak trees, in which they found phenol, guaiacol, creosol, ethylguaiacol, &c. M. Barcker also contributed some remarks on the question of the stability of bichloride-of-mercury solutions. His experiments show that they are durable when made with distilled water, but that ordinary water decomposes them immediately.

**THE 1900 PARIS EXHIBITION.**—The management of the next Paris Exhibition has already made considerable progress towards its organisation, and at the commencement of the present week the "Superior Commission" held a meeting at the Ministry of Commerce to finally settle the principal lines of classification. It has been decided to divide the Exhibition into 17 groups which will be sub-divided into 117 classes. The divisions seem to have been made with much forethought, though doubtless certain additions may be necessary. Under group 3, for "Instruments and General Processes for Letters, Sciences and Arts," photography and medicine and surgery have a class each; "Electricity" figures as group 5, in which "Electrochemistry" is allotted class 24. Group 14 will represent "Industrial Chemistry"; the "Chemical and Pharmaceutical Arts" appear as class 86, while "Perfumery" is class 89. The details of organisation are to be confided to four sub-commissions. At the close of the meeting, M. Berger, the manager of the 1889 Exhibition, insisted a great deal on the necessity of selecting a new site in place of the Champs de Mars. His successor, M. Picard, took the opposite view, and on a show of hands being taken it was found that the Superior Commission ratified the selection of the ground as in 1889 with certain additions.

## Foreign and Colonial News.

**NO BUSINESS DEPRESSION HERE.**—Last year Cape Colony imported 230,491*l.* worth of drugs and chemicals. In 1892 the imports only amounted to 173,098*l.* worth.

**AMERICAN BRANCH OF THE S.C.I.**—The members of the Society of Chemical Industry residing in the United States, within a 70 miles radius of New York, have decided to petition the Council in London for permission to form a New York Section.

**A FAMILY POISONED IN QUEENSLAND.**—According to a Reuter's telegram from Brisbane, a woman poisoned herself and her five children with carbolic acid on Saturday last in the town of Maryborough. The poison proved fatal to all except one of the children, which is recovering. It is stated that domestic troubles affected the woman's mind.

**THE FRENCH MATCH-MONOPOLY.**—As everybody knows, the manufacture and sale of lucifer matches in France are a national monopoly. The statistics for 1893 of this branch of industry, which have just been published, show that in the course of the year 28,422,000,000 matches were turned out at a cost of 3,394,270*f.* The net profit on the business was 19,000,000*f.* About 6 per cent. of the total output was wax vestas, the rest wooden lucifers.

**IMPERIAL PHARMACOPŒIA IN CANADA.**—The *Montreal Pharmaceutical Journal* mentions that some time since a number of letters were sent out requesting an expression of opinion on Professor Attfield's paper on "An Imperial Pharmacopœia." Our contemporary "regrets that it does not seem to have aroused much interest, as most of the responses so far received indicate that the writers are too busy to look into the matter, or do not seem to care anything about it."

**RUSSIAN NATIONAL COMMERCIAL AGENTS.**—Russia is, to some extent, following the lead of Victoria, in sending State-paid commercial agents to foreign countries for the purpose of promoting trade. Eight such agents are to be appointed at the beginning of next year by the Russian Department of Commerce and Manufactures, which is a section of the Ministry of Finance. One agent will be stationed at a point on the German Ocean, one in the United Kingdom, two at Mediterranean ports, and four in Central Asia.

**RED CROSS IN U.S.A.**—We notice from the *Druggists' Circular* that the House of Representatives at Washington has passed the Bill protecting the insignia and name of the Red Cross Society against appropriation for trade purposes. Those who do so are liable to a fine of not less than \$50 nor more than \$500, or to imprisonment not exceeding six months. Persons who have adopted the Red Cross as a trade-mark shall discontinue its use within one year. The Society may, however, permit the use of their insignia for a consideration of not less than \$500 in each case.



APPENDIX TO THE GERMAN PHARMACOPŒIA.—The Imperial Chancellor, General von Caprivi, has applied to the Federal Council to sanction the publication of the projected Appendix to the German Pharmacopœia, and to fix a date at which the Appendix shall become operative. Alterations are proposed to be made in thirty-one Pharmacopœia articles, and it is suggested to add fourteen new ones, viz :—Acid. camphoricum; acid. hydrobromi; aqua cresolica (1 part of creosol-soap to 9 of water); bismuth. salicyl. bas.; cereoli; coffeinum natrio-benzoicum; cresolum crudum; liquor cresoli sapon.; lithium salicyl.; pastilli hydrarg. bichlor.; pilule creosoti; theobromin. natriosalicyl.; tinct. aloes; ung. cantharid. pro uso veterinario.

MONTREAL COLLEGE OF PHARMACY.—Mr. David Watson presided at the annual meeting of this College, held on May 10. The reports presented showed a very satisfactory year's work. A cash balance of \$577 was in hand. In regard to educational and examination matters, the past session had been the most successful the College had known. The number of students was seventy-six—an increase of twelve over the previous year. The number of members on the roll was only forty-six; but it was hoped that a number of new members would be enrolled during the ensuing year. After the presentation of prizes, the following officers were elected:—President, Mr. David Watson (for the seventh time); Vice-President, Mr. S. Lachance; Treasurer, Mr. A. Manson (for the ninth time); Secretary, Mr. E. Muir; Executive Board, Messrs J. R. Parkin, W. H. Chapman, A. J. Lawrence, J. E. Tremble, W. S. Kelly, C. J. Covernton, J. E. Morrison, A. D. Mann, and E. Giroux, jun. The question of inviting the American Pharmaceutical Association to hold its next Convention in Montreal was discussed, and a committee was appointed to consider the matter.

THE LIVING-WAGE IN THE GERMAN GLASS-BOTTLE TRADE.—The directors of the Oldenburg Glassworks, a factory in which 570 men are employed, have got at loggerheads with their operatives, and a strike is impending. The cause of the trouble is the decision of the directors to reduce the wages of their 316 glassblowers from July 1. The directors justify their action on the ground that the average price of goods such as they manufacture has fallen by about 5 per cent. since last year, and that many of the leading factories in Germany pay still lower wages than the reduced scale which the Oldenburg factory proposes to adopt on July 1. The reduction which the directors propose to enforce is at the rate of 5pf. ( $=\frac{3}{4}d.$ ) per 100  $\frac{1}{2}$  bottles, 10pf. ( $=2\frac{1}{2}d.$ ) per 100  $\frac{1}{4}$  bottles, and 20pf. ( $=2\frac{3}{4}d.$ ) for 100 bottles of a special kind. This, the directors say, would reduce the wages per man by from 2s. 8 $\frac{1}{2}d.$  to 9s. per month. Men who work with an assistant, whom they pay themselves, would lose from an equivalent of 15s. to 30s. per month, but their wages would still remain over 10l. per month, out of which they give 45s. at most to their helpers. The workmen have decided, if the directors carry out their intention, to strike work on July 1, as the lowering of wages would reduce their means below the level of a "menschenwürdige Existenz"—an existence worthy of human beings—which is the German for the more forcible and direct "living-wage."

PERFUMER AND REVOLUTIONIST.—The art of perfumery is not usually associated with revolutionary doctrines; in fact, it seems rather to tend towards extreme conservatism of habit. Revolutions, we have it on high authority, cannot be made or cured with rose-water, yet there has just died in Frankfort-on-Main, old in years and high in the esteem of his fellow-citizens, a perfumer who, sixty years ago, fought and suffered for political freedom in his native country. Herr Johann Georg Mouson, who died on Friday last, aged 82, was a native of the city of Frankfort, and in 1833 took part in an armed insurrection against the powers that then existed in that ancient but by no means free burgh. For his share in this abortive rebellion young Mouson was sentenced to five years' imprisonment. When set at liberty, he started business in his native city as a perfumer, under the style of J. G. Mouson & Co., and soon became very prosperous. The firm still exists as one of the principal perfumery-houses in Germany, and now belongs to two nephews of the deceased gentleman, who never married. Herr Mouson took an exceedingly active part in the political life of his native city until, in 1866, Frankfort was incorporated into Prussia. He remained an advanced democrat

until his death, and was exceedingly popular in the city on account of his charitable disposition and his many other excellent characteristics. The deceased left instructions that his body was to be cremated at Heidelberg. Herr Mouson was probably the last survivor of the forty-four revolutionists who were tried for their part in the insurrection of 1833. They all formed part of the "League of the Proscribed," the object of which was "the freeing of Germany from the yoke of contemptible bondage and the establishment of a new social order which, as far as human foresight can do so [a characteristic qualification], shall prevent a falling back into servitude and misery." Precisely how this object was to be attained the Proscribed did not explain, but they recognised that it could only be attained "by establishing and maintaining social and political equality, freedom, civic virtue, and national unity, first of all in the countries belonging, by language and customs, to Germany, and then among all the other nations of the earth."

#### AUSTRALASIAN NOTES.

THE following notes of Australasian news are based upon information appearing in the *Chemist and Druggist of Australasia* of May 1:—

PATENT MEDICINES IN NEW ZEALAND.—New Zealand imports annually some 38,000l. worth of patent or proprietary medicines. On this amount it pays 25 per cent. duty.

THE N.S.W. PHARMACEUTICAL REGISTER.—The register for the colony of N.S. Wales for the present year contains the names of 545 pharmacists, inclusive of thirty-five medical men.

"LONG DAYS OF LABOUR AND NIGHTS DEVOID OF EASE."—"All-night pharmacy" has come to stay at Sydney. On April 16 a year had passed since Mr. H. A. Rose's "All-night Pharmacy" arose on George Street, and the proprietor is so well satisfied with the venture that he will continue the business.

THE QUEENSLAND SOCIETY'S NEW REGISTRAR.—Mr. E. C. Blake has been selected by the Pharmacy Board of Queensland to succeed Mr. W. J. Ryott-Maughan, who resigns the position on account of having undertaken the editorship of the *Chronicle*, a new political journal, as Registrar to the Board. The position carries an annual salary of 40l. There were fourteen applicants.

HE'LL SEE ABOUT IT.—On Wednesday, April 11, the Colonial Treasurer, Mr. John See, was interviewed in an unofficial way by a number of prominent N.S.W. pharmacists to jog his memory with regard to that unfortunate Pharmacy Bill. The usual arguments in favour of the introduction of the measure were repeated, and Mr. See, "without committing himself to any promise, said he would consult his colleagues in the matter." The delay in the matter of the N.S.W. Pharmacy Bill almost amounts to a legislative scandal.

PHARMACISTS AND CHARGES OF ABORTION.—William Chopin, a Western Australian chemist, was on April 5 found guilty of attempting to procure abortion. The offence for which he was brought to justice was the last of a long series. In such seclusion as residence (for the space of ten years) in a penal-servitude establishment affords, William will be able to consider whether, if only from a mere business point of view, the game is worth the candle. On the day on which Chopin was sentenced the Mayor of East Maitland, N.S.W., one George Thomas Chambers (also a pharmacist), appeared before the Police Magistrate, to answer a charge of supplying one Annie Reddell, aged 18, with  $\frac{1}{2}$  oz. of *ext. ergot. liq.* for the purpose of procuring abortion. The Mayor was committed for trial by the Magistrate, though the J.P.'s sitting with that functionary favoured an acquittal.

ANOTHER "SNAKE-BITE ANTIDOTE."—An alleged antidote for snake-bite was tried at the Technical School, Hobart, on April 14, several medical and other gentlemen being present. The discoverer, Mr. Fazakelly, of Dunally, brought with him a brown snake and two wild rabbits, which the snake was allowed to bite. The first one bitten was treated with the



antidote, a transparent vegetable decoction, while the second one, not so treated, was given five minutes in which to die. But it didn't come off. The rabbit that should have died persisted in living for some hours, and the one that should have lived was found in a hopeless condition next morning.

**CHEMISTS AND THE NEW ZEALAND LIQUOR LAWS.**—The event in New Zealand last April was the "licensing election," under which, for the first time in the history of the colony, the question of dealing with the sale of alcoholic liquor was put to the popular vote. The new "Alcoholic Liquors Sale Control Bill," requires a three-fifths majority of voters to carry absolute prohibition, and although this percentage has not been gained, most constituencies have voted in favour of reduction of licensed houses. Chemists have taken an active interest in the questions at issue. In Dunedin, Mr. W. Wardrop, who stood as a temperance candidate, headed the poll, while Messrs. T. M. Wilkinson and W. Elder, who figured as "moderate" candidates, were defeated. Mr. E. B. Jones, of Invercargill, was also elected in the interests of the temperance party. The prohibitionists are on the whole satisfied with the results of the poll, and expect at next triennial election to achieve complete victory. The subject is of interest to chemists, as, given prohibition, alcohol would be supplied only on physicians' orders.

**NEW ZEALAND DRUG COMPANY.**—The annual meeting of Messrs. Kempthorne, Prosser & Co.'s New Zealand Drug Company was held on March 15. Mr. B. Sievwright, chairman of the board, presided, and about twenty shareholders were present. In moving the adoption of the annual report and balance-sheet, the Chairman remarked that the outcome of the year was not quite so good as they could desire, but, taking all things into consideration, it was fairly satisfactory. They could pay their usual dividend and carry forward the substantial sum of 12,852*l.* to next year. The debenture liability was increased by 2,500*l.*, being now 17,600*l.* as against 15,100*l.* at the last balance. As to the assets, the stock value was 101,084*l.* 18*s.* 6*d.*, or 4,980*l.* less than last year. The warehouses, premises, land, fixtures, and plant, less 5,696*l.* depreciation provided for in former balance-sheets, amounted to 37,478*l.* 15*s.* 1*d.*, being an increase of 2,432*l.* caused by the erection of a new warehouse on the Christchurch property. Book-debts amount to 23,677*l.* 12*s.* 3*d.*—a reduction of 3,579*l.* from last year. Profit-and-loss account showed a total of 33,438*l.*, as against 32,368*l.* last year. They had had a hard year's work and an increased output. Profits were cut very fine, and this might continue for some time to come, but they had determined to show their strength and to do the business. The report was adopted.

**LICENSING UNQUALIFIED MEN IN N.S.W.**—Applications by half-baked pharmacists and other unqualified persons for licences to sell poisons at out-stations form a regular dish at the monthly meeting of the N.S.W. Pharmacy Board. On April 3, when that body foregathered according to custom, thirteen such applications were dealt with, ten being granted (mostly on the ground that there was no pharmacist within reasonable distance of the applicant) and three refused. One of the last-named was from a gentleman describing himself as "of the steamer *Victor*, Darling River." The Board did not see their way to allow the applicant to run a peripatetic poison-shop along the banks of the stream. They also (after much heart-searching) refused the application of a young Aberdonian called Dalgarno, who keeps a general store (to which is annexed a chemist's department) at a township known as Cobar, 460 miles from Sydney and 83 from the nearest railway station, and who attended personally to support his application. Although the population of this interesting settlement is thought to be somewhere about 1,300, a qualified pharmacist who was established there could not make ends meet, and retired from the field, in spite of the fact that his name was Stuart Allen Buchanan. But in the place whence even a fellow-Scot had to clear, the frugal Aberdonian makes a living out of books, jewellery, stationery, and confectionery. He thought strychnine would likewise be a profitable article to retail, and accordingly applied for leave to sell that and other scheduled poisons. But as, in cross-examination, he was forced to admit that his establishment is already, to all intents and purposes, an ordinary chemist's shop, and that he even goes so far as to dispense prescriptions, and to call himself a chemist and druggist, the Board refuse to legitimise Mr. Dalgarno's

present irregular connection with pharmacy, and the applicant withdrew, the poorer for his travelling-expenses.

**THE PHARMACEUTICAL SOCIETY OF AUSTRALASIA.**—The thirty-seventh annual meeting of the Pharmaceutical Society of Australasia (*i.e.*, the Pharmaceutical Association of the Colony of Victoria) was convened in Melbourne for Thursday, March 22, at 8 P.M., but at that hour only seven members, including the officials, were present, and, these not being enough to form a quorum, the meeting was adjourned until March 29, only the distribution of prizes to students being proceeded with. The adjourned meeting fell through once more for want of the attendance of sufficient members to constitute it an assembly legally qualified to transact business, and a fresh adjournment became necessary. The third time of trying—on April 3, at 11 P.M.—the Society, which is supposed to represent all the Australias, was able, by heroic efforts, to attract seventeen pharmacists sufficiently interested in its movements to enable the annual meeting to be proceeded with. The President (Mr. J. George) then delivered himself of his long-pent-up annual address, in which the position of the Society was pictured in fairly bright colours. The College of Pharmacy, said Mr. George, was flourishing. Eighty-nine students had presented themselves for examination in 1893. The library and museum were also doing well, and the formation of advanced classes for students desiring to qualify as public analysts was under consideration, a syllabus having been drafted at the invitation of the Board of Health. Intercolonial reciprocity in pharmaceutical degrees Mr. George regretted to be still a thing of the future. New South Wales and South Australia have not yet assimilated their pharmacy legislation with that of Victoria, and without this reciprocity is impracticable. The discovery of an old statute enabling the Society to deal with herbalists had enabled them successfully to institute a series of prosecutions. While the English Act merely prohibited "the keeping of open shop for the sale of poisons," the Victorian statute safeguarded the public much more efficiently by making it an offence for an unqualified person to carry on the business of a chemist or druggist. Referring to the work of the new year, the President hoped that members would contribute of their local knowledge to the new edition of the British Pharmacopœia now in preparation. Something, he trusted, would also be done towards removing the obstacles to intercolonial reciprocity. The usual compliments concluded the business of the meeting. The annual report of the Council shows that the Society now owns a credit balance of 1,548*l.*, or 159*l.* more than in 1893, while the College of Pharmacy shows a balance of 438*l.* Looking at the accounts in detail, we find that the income of the Society amounted to 405*l.* 19*s.* in 1893, against 475*l.* in 1892. The falling-off occurs in the members' subscriptions, which are 77*l.* less than in the previous year. The examination-fees have increased by 27*l.* Nothing in the accounts shows that the balance of 1,548*l.* has been invested or even deposited in a bank. The Benevolent Fund shows the steady increase from 420*l.* 3*s.* 7*d.* to 436*l.* 14*s.* 1*d.* The accounts of the College of Pharmacy show a state of prosperity unusual among Victorian institutions at the present time. The credit balance brought forward has steadily increased. It was 224*l.* in 1891, 276*l.* in 1892, and 438*l.* in 1893. The fees received from students are 15*l.* less than in 1892, but the Government grant figures at 1,000*l.*, instead of 920*l.* in the previous year. The list of members of the Society, compared with that in the report for 1891, shows a loss of over 24 per cent. within the space of two years. In 1891 the Society numbered 304 members in Victoria, now it has only 245; the membership in New South Wales has fallen from 32 to 20, in Queensland from 14 to 6, in South Australia from 13 to 10, in New Zealand from 3 to 2, and in Tasmania from 18 to 8. In Fiji, where in 1891 the "Pharmaceutical Society of Australasia" still counted 2 lieges, there is now no longer a soul to do it reverence. Against all this shrinkage the modest flowering of Western Australia, where there are now 2 members against 1 in 1891, seems but a deception as of a mirage. Perhaps the Society will now consider whether a humbler title will not better suit its altered circumstances. It is to be feared, however, that it will not have sufficient sense of humour to do so, but will rather, like so many dried-up old-world monarchs, stick to a title long after it has ceased to have any intelligible meaning.



## Bankruptcies and Failures.

*Re* ISAAC LEVY, 20 Houndsditch, Sponge-merchant.

On June 8, at the London Bankruptcy Court, before Mr. Registrar Brongham, this bankrupt was allowed to pass his public examination upon accounts showing liabilities 1,554*l.* and no available assets.

Mr. E. Leadam Hough, Official Receiver, conducted the examination, and Mr. Le Voi appeared for the bankrupt.

In the course of his evidence the bankrupt said he had traded from 1871 until last October, when at the request of his creditors he executed a deed of assignment. He had also traded for three months under the style of the Brush-makers' Association, but he did not use that name for the purpose of obtaining credit. He had also sold diamonds on commission for two persons from South Africa, but those dealings were more than two years ago. In August last he sold a valuable diamond ring for 25*l.* It was a genuine sale, and it was not the fact that he first pawned the ring and subsequently sold the ticket. For some little time after executing the deed of assignment witness was employed by the trustee to assist in the realisation. That having been effected, the premises were taken over by his wife, who now carried on the business and employed him as manager at a weekly salary of 2*l.* His wife had no considerable private means, but she had some rich relations. (Laughter.) Witness had no interest now in the business, nor had he incurred any liabilities since executing the deed of assignment. It was only a fortnight before that deed was signed that witness discovered his insolvency, he then being called upon to take up some accommodation bills, in respect of which he had made heavy losses. He had deposited for a time several cases of sponges with a Mr. Marks, but they had all been returned to him prior to the failure. The goods were being delivered to Houndsditch on a rainy day, and as the rain came into witness's premises he got Mr. Marks to take care of them for a time. Even a sponge-merchant's goods did not improve with a wetting. (Laughter.)

The bankrupt was questioned respecting two parcels of goods supplied by creditors at an invoice price of 548*l.* He stated that he gave bills in payment, and sold them to a customer for cash at the small profit of 1 per cent. That was not the usual trade profit, but he considered he paid a dear price for the goods.

The Official Receiver: But you did not pay anything for them, so they were very cheap. (Laughter.)

Mr. Levy replied that he had intended to meet the bills in due course, and would have done so but for the failure.

The inquiry was then closed, the bankrupt having been shortly re-examined by his solicitor.

*Re* WILLIAM TAYLOR, 29 Seed Street and 35 and 37 Stand Lane, Radcliffe, Druggist and Drysalter.

THE first public examination of this debtor has been held at the Bolton Bankruptcy Court. Debtor about ten years ago purchased for 300*l.* the drysalter's business at Radcliffe, where he had been previously employed as an assistant. The business paid nicely, and his present difficulties were due to his having guaranteed advances to friends by money-lenders. The Official Receiver suggested that an arrangement might be made in regard to one of these, and an adjournment was made.

*Re* JOHN RAYNHAM, Coggeshall, Patent-medicine Vendor.

THE above bankrupt came up for his public examination at the Chelmsford Bankruptcy Court, before Mr. Registrar Duffield, on June 7. The summary of accounts filed by the debtor showed a deficiency of 89*l.* 5*s.* 3*d.* The debtor, in reply to a question as to whether the profit on patent medicines was from 250 to 300 per cent., said the profit to the retailer was from  $\frac{1}{4}$ *d.* to  $\frac{1}{2}$ *d.* per box, but to the maker there was probably about 150 per cent. He used to get a profit of 3*d.* on each box at 1*s.* 1 $\frac{1}{2}$ *d.* He afterwards sold the boxes at 11*d.*, and then a chemist, not liking the opposition, sold them at cost-price, and debtor had to reduce his to the same price. He had been in business about a year and nine months.

The Official Receiver: Is it not a fact that you have made something like 200 to 300 per cent. profit upon the sale of these patent medicines?

The Debtor: No, sir; certainly not. I should not have been in this position if I had. The fact of my not having been registered under the Pharmacy Act was against me, and I was not allowed to make up doctors' prescriptions. The debtor, in reply to further questions, said his wife claimed the furniture at present in his house, it having been given to her by her father, who was a large farmer in Suffolk. His father-in-law had also lent him 110*l.* The debtor was eventually allowed to pass.

LIQUIDATION OF F. KING & Co., Belfast.

IN the Chancery Division of the High Court at Dublin, before the Master of the Rolls, on June 6, an application was made on behalf of Gordon & Dillworth (Limited), Eastcheap, London, creditors, for an order that Mr. George Johnston, of Royal Avenue, Belfast, should be removed as liquidator of the company on the ground that he was one of the promoters of the company; that the agreement for the purchase by the company of the property and business of Benjamin Maxwell, F. King & Co., Edwards's preserved potatoes, and Edwards's desiccated soup was entered into by him on behalf of the company; that he was appointed under the articles of association the first auditor of the company, and had acted as such; that the accounts and balance-sheets of the company, presumably audited by the said George Johnston, have been ascertained to be misleading and erroneous, and not to disclose the true position of the company and its affairs; that an examination of said George Johnston will be necessary respecting the promotion of the company and respecting its accounts, and also respecting the accounts and balance-sheets of the Belfast Warehouse Company (Limited), of which company also the said George Johnston was auditor.

According to the statement made on behalf of the applicants, the original connection of George Johnston with the company had not been disclosed to the Master of the Rolls when the appointment was made.

The application was not opposed, and the order was made accordingly—a new liquidator to be appointed by the Court in Chambers.

*Re* ARTHUR FRENCH ST. GEORGE, 89 Earlsbrook Road, Earlswood, Chemist and Electrician.

THIS debtor petitioned the London Bankruptcy Court on Tuesday last, when the usual receiving order and an order of adjudication were made by the Court. He states that he is now employed by a firm of chemists at Bermondsey. The only assets are patents of uncertain value. The house at Earlswood is rented by his wife, to whom the furniture belongs. There was a previous failure in 1885. The amount of the liabilities was not stated.

## Gazette.

### PARTNERSHIPS DISSOLVED.

Carr, H., Carr, J. N., and Carr, T. W., Carlisle, millers, and bread and biscuit manufacturers, under the style of Carr & Co.

Dale, H. L. M., and Dallen, A., masseuses, Jernyn Street, W., under the style of Mrs. Wiseman.

Donston, W., and Hill, F. M., dental surgeons, Cromwell Road, South Kensington, S.W., under the style of Donston & Hill.

Haynes, F., and Wakefield, S. B., dental surgeons, Southsea, under the style of Haynes & Wakefield.

Phillips, E. H., and Phillips, J. I., ivory-brush manufacturers, Rupert Street, Haymarket, S.W., under the style of M. A. Phillips.

### THE BANKRUPTCY ACTS, 1883 AND 1890.

#### ADJUDICATION.

Caffyn, Stephen Mannington (described in receiving order as S. Mannington Caffin), Gwendwr Road, West Kensington, W., surgeon.

#### SEQUESTRATION.

M'Allister, Robert Dempster, chemist and druggist, Biggar. Creditors will meet in the Clydesdale Hotel, Lanark, June 20, at 12 o'clock. Andrew Smith, writer, Lanark, agent.



## Legal Reports.

### TYSON v. TYSON & Co. (LIMITED).

IN the Queen's Bench Division, on June 8, before Justices Cave and Collins, Mr. Hume Webster moved, on behalf of the plaintiff in this action, that the order of Mr. Justice Lawrance, that the plaintiff's application to continue the interim injunction granted herein, be dismissed, and that the costs of and occasioned by the application be the defendants' costs in the cause, and that the defendants be restrained from advertising or dealing with or representing themselves to be the proprietors of certain drugs known as Dr. Tyson's vegetable cure for drunkenness, or any drugs compounded according to the plaintiff's formulae.

Mr. Webster said the facts were somewhat involved. The plaintiff, Dr. Tyson, was the proprietor and sole manufacturer of these drugs. He made them in the United States, and the object of them was to provide a vegetable cure for drunkenness. The cure was a very valuable property, and had a large sale. In 1893 Dr. Tyson was desirous of finding a purchaser in England for his proprietary right in the preparation, and consequently he executed a power of attorney to a man called Eyre. Mr. Hair came to England and went to stay with a Mr. Stephens, who carried on the trade of a patent drug proprietor in Holborn under the name of B. W. Hair. Whilst at the country house of Stephens an agreement was entered into which it was one of the objects of this action to set aside.

Upon the agreement being produced to the Court,

Mr. Justice Cave pointed out that it was unstamped.

Mr. Banks, who appeared for the respondents, said that he did not wish to raise the stamp objection, but he must object to his learned friend trying to get on without the agreement because his case was that his (Mr. Banks's) clients were not acting up to the agreement.

Mr. Justice Cave: You cannot object to his "trying," (Laughter.)

After some discussion, Mr. Hume Webster asked for an adjournment for a few days, in order to communicate with his client (who was in Ireland) as to whether he was prepared to go on. The Court thereupon adjourned the matter for a week.

### DELAY IN DELIVERY.

AT the Cardiff County Court, before Judge Owen, on June 7, the Cardiff Quinine Bitters Company (Limited) sued Messrs. Hewitt, Bunting & Co., Walton Works, Chesterfield, for the recovery of 33%, damages caused by their alleged delay in delivering goods. The plaintiffs were the owners of the Crown Matchworks, Llandaff, and on February 24 they ordered from the defendants 600 lbs. of vesta-cotton for the manufacture of wax matches. On February 28 they received the invoice from the defendants, and on March 1 sent the cheque for payment. The goods, however, did not arrive till March 14. They had in the meantime run out of the whole of their material for the manufacture of matches, and being of a special texture it could not be bought elsewhere. The result was that the factory was idle for eleven days. The cotton in question would have manufactured 600 gross of matches, the profit on which to the company was 1s. a gross, amounting to considerably more than their claim. For the defence it was argued that the damages were not legally recoverable and his Honour took this view. He pointed out if the plaintiffs had said, "If you do not deliver within certain time we shall hold you liable," the case would have been different. Judgment for the defendants, with costs.

### ACTIONS UNDER THE DENTISTS ACT.

AT Manchester, on June 8, James McDonald, of 29 Piccadilly, and Arthur Lestrangle, 49 Stockport Road, were summoned, at the instance of the British Dental Association, for using descriptions of themselves which the Act did not allow unqualified persons to use. Lestrangle was stated to have called his establishment "Ardwick Dental Surgery," while McDonald on his card used the words "McDonald's

Free Dentorium," and "Dentist" was given as the telegraphic address. In this case it was said there was a qualified dentist in the place. McDonald was fined 10% for using the word "dentorium," and 5% for using the word "dentist," with 5% extra costs. Lestrangle was fined 5% and costs.

AT Lancaster Police Court, on June 9, Robert Knowles, chemist, of Morecambe, was summoned, at the instance of the British Dental Association, for an alleged infringement of the Dentists Act. Mr. Turner, barrister, of London, prosecuted, and Mr. Tilly, solicitor, defended. The evidence showed that the defendant, who is a qualified chemist, purchased the practice of the late Mr. Cutts, dental surgeon, recently. On the door and windows there was a sign, "Dental depôt; teeth extracted." There was also an india-rubber doormat bearing the word "dentist," which was visible, although the mat was turned upside down; and defendant inserted in the local papers advertisements calling attention to the dental part of his business. Mr. Tilly, for the defence, said there was no intention to break the law. It was open to anybody to draw teeth and make a charge, and the only illegality consisted in such persons describing themselves as dentists. The defendant had removed all references to "surgeon-dentistry" in his advertisements, and the only way in which the word "dentist" was used was on the mat, which since Mr. Cutts's time had always been kept face downwards. The Bench considered the case proved, and fined defendant 20s. and costs.

### A DEAL IN COPPER SCALE.

ON June 9, in the Lord Mayor's Court, before the Common Serjeant (Sir Forrest Fulton, Q.C.) and a jury, an action was brought by Mr. Wm. Boundy, metal-broker, of Billiter Square Buildings, against Mr. Ebenezer Wood, manufacturing chemist, Canning Town, to recover 18*l.* 19*s.* 4*d.*, being the difference in value between a sample of copper scale, upon which the plaintiff had given an order, and the bulk supplied by the defendant. The plaintiff said that in September last he received from the defendant a sample of copper scale, which he sent to Mr. H. James, analytical chemist, of Swansea, who certified it to contain 49 per cent. of copper. He ordered about 4 tons of the article to be delivered to Messrs. Hill & Son, Carville, near Newcastle-on-Tyne, and on October 23 he received an invoice for 55*l.* 12*s.* 6*d.* He paid this by cheque. Messrs. Hill & Son's weigher, as was customary, took a sample from the bulk on arrival, and sent it by post to the plaintiff, who forwarded it to Mr. James for another assay. Mr. James reported that the sample contained only 35 per cent. of copper. The plaintiff claimed an allowance of 18*l.* 19*s.* 4*d.*, being the amount he had to allow to his buyer. In cross examination by Mr. Wilcey Wright, plaintiff said that he had had thirty years' experience in the trade. He had never heard it suggested before that complaints as to quality should be made within fifteen days of sale. Witness agreed that the sampler might easily make an error. The copper scale had been put into casks and sent away on October 23, and if the stuff had been kept under cover no moisture would get at the copper scale. If the moisture had been there before he would, of course, expect to find it at the bottom of the casks.

Evidence in support of plaintiff's claim having been given, the defendant said that in September last he showed a sample of copper scale to the defendant, on which an order was given. The sample he had received from Messrs. Allen Everett & Sons, Birmingham, and the order had been given to them. The "prompt" in the trade was fourteen days, and the custom was that any complaint must be made within the "prompt." The Judge remarked that a custom to be a custom must be reasonable. It would be an unreasonable time to obtain a proper analysis of copper scale. It might be a reasonable time for an analysis of butter. Witness: But copper scale, my Lord, is much more easily tested than butter. (Laughter.) Mr. Chas. Albert Davis, employed by Everett & Son, said the copper scale was the result of drawing or rolling copper, and was the residue collected on iron plates. The sample had been taken from the bulk which had been eventually supplied. The jury found for the plaintiff for the amount claimed, 18*l.* 19*s.* 4*d.*



## PARAFFIN-WAX IN CONFECTIONS.

SHERIFF BIRNIE has given his decision in the case in which Messrs. Downie Brothers, 46 Candleriggs, Glasgow, were charged by the local sanitary authorities with a breach of the Food and Drugs Act, by having on February 7 sold twelve chocolate cigars which were certified to contain 4 per cent. of paraffin-wax, extraneous to chocolate cigars. His Lordship, in giving judgment, said that the prosecutor purchased from the respondents certain chocolate cigars, four for a penny, which on analysis had been found to contain not only chocolate and sugar, but paraffin-wax. The prosecutor said that those were not of the nature, substance, and quality demanded, and that the respondents had incurred a penalty. Chocolate consisted of ground cocoa and sugar, and had the prosecutor asked for chocolate and got paraffin-wax the respondents would have been within the Act. But chocolate cigars could not be made solely from chocolate and sugar. They required in addition some glutinous substance to keep them in shape, and while in the dearer cigars cocoa-butter was used, in the cheaper ox-fat, mutton-fat, beeswax, and paraffin-wax were used, and both kinds of cigars had been in the market for years under the name of chocolate cigars. When, therefore, the prosecutor asked for chocolate cigars, and paid the price of the cheaper cigars, it seemed impossible to say he did not receive what he demanded. Evidence was led to show that paraffin-wax was injurious to health, and it might be well that parents knew it was not a food, but a mineral extracted from shale; but with the injury to health he could not deal under the sixth section of the Act, under which the prosecution was laid. He, therefore, dismissed the case, but allowed no expenses.

## CHEMISTS AND OPTICAL GOODS.

In the City of London Court, on Tuesday last, before Mr. Commissioner Kerr, the adjourned case of the British and Foreign Optical Company (Limited) *v.* Moss was again heard. The action, which was briefly reported in the columns of THE CHEMIST AND DRUGGIST last week, was brought by the plaintiff company, of 12 Fumival Street, Holborn, and they sought to recover the sum of 4*l.* from the defendant, Mr. Ernest Moss, chemist, 25 Queen Street, Ramsgate, as damages for refusing to take delivery of certain optical goods which, it was alleged, he had purchased of the plaintiffs. Mr. Raw appeared for the plaintiff company, and Mr. Skinner Turner was counsel for the defendant.

Mr. Raw said no doubt the learned Judge would remember the case. Judgment was given for his clients on the last occasion.

Mr. Turner said it was nothing of the sort. The case was simply adjourned for the plaintiff company to show what, if any, damage they had suffered by the defendant declining to take in the goods.

Mr. Isaacs, the traveller who took the order, said the printing which was done for the defendant specially by them so that the defendant could properly represent them would cost 1*l.* 5*s.* The money had not been paid yet.

Mr. Commissioner Kerr said the plaintiffs had sustained no damage until they had paid the bill. The printer had claimed 25*s.*, but that did not make it a proper claim. Suppose the printer had charged 1,000*l.* Would the plaintiffs still ask the defendant to pay it because they had a statement sent them for the amount?

Mr. Turner said he asked for judgment for the defendant. The only contract between the parties was one in which the defendant was to have the printing matter supplied to him free of charge.

Mr. Commissioner Kerr said that would have been so if the defendant had continued to be the plaintiffs' agent and sold their goods. But there was evidence of a breach of contract, and the defendant must pay what damages had been incurred. He would adjourn the case until Friday for the attendance of the man who did the printing.

Mr. Turner said the defendant had already been twice from Ramsgate.

Mr. Commissioner Kerr: He will have his costs.

Mr. Raw suggested there was no need for the defendant to have attended.

Mr. Commissioner Kerr said the defendant was entitled to come if he liked when he was sued. The plaintiff company

very absurdly claimed an imaginary damage. They thought they were going to get the profit which they would have received if the defendant had sold their goods. Every suitor was entitled to come to the court. If they would revert to the old common law of the country it would be much better if, when a case was adjourned, what was known as a "continuance" was entered. Those things were entirely unknown to the practitioners of the present day, who were an ignorant lot. (Loud laughter.)

The case was then adjourned and the defendant's costs of the day allowed for the second time.

## RESPONSIBILITY OF THE PUBLIC ANALYST.

THE case of Johnston *v.* Smith tried before Mr. Justice Wills and a special jury on June 8 in the Queen's Bench Division of the High Court, raised a point of great importance to public analysts and to persons who may be unjustly injured by their official certificates.

The plaintiff in this action is a dairyman and provision-dealer at Woolwich, and the defendant is Dr. W. R. Smith, the Public Analyst for Woolwich. He also described himself as director of the laboratories of State medicine and professor of forensic medicine at King's College, London.

In December, 1892, John Carty, the inspector appointed by the Woolwich Local Board, purchased a pint of milk at Mr. Johnston's shop for analysis. He said in his evidence that he filled three 6-oz bottles with the milk, sealed them, marked them all 682, and sent one of the samples to Dr. Smith. Dr. Smith certified that the sample contained 20 per cent. of added water. The defendant was summoned, and ultimately one of the samples was sent to Somerset House for analysis. That sample was analysed by Dr. Bannister, in the presence of Dr. Bell and Mr. Cameron. They found no added water. The summons was consequently dismissed. Mr. Alfred de Hailes had examined the other sample, and said he found about 3 per cent. of added water. On these facts Mr. Johnston sued Dr. Smith for damages, alleging negligence.

In cross-examination, the inspector who purchased the milk admitted that he took four samples of milk from four people that day, that his sight was weak, and that he had on a precious occasion made a mistake in numbering a sample. The other chemists also said that they could only account for the discrepancy by assuming that different samples had been under analysis. Mr. de Hailes said the defendant was a very eminent person in his profession.

For the defendant, it was first argued that no action would lie against the defendant for negligent performance of public duties, but the Judge said he should require that point to be very elaborately argued. He would first, however, take the opinion of the jury on the question of negligence.

Dr. Smith then described his two analyses of this sample, both of which agreed, and in this he was confirmed by Mr. Huntly, senior demonstrator in the laboratory of King's College. Dr. Smith also said he had had to complain of the way in which the inspector placed the samples before him.

The Judge asked the jury whether it had been proved to their satisfaction that the defendant had been guilty of negligence, and they found that he had not. Judgment was accordingly entered in his favour.

Mr. Bonsey argued the case for the plaintiff, and Mr. Channell, Q.C., for the defendant.

## PROSECUTIONS OF OLDHAM CHEMISTS.

AT the Oldham Police Court on Thursday, June 14, judgment was given in the prosecutions brought under the Pharmacy Act by Mr. W. James Leggett, of 95 Boaler Street, Liverpool, the hon. secretary and treasurer of the Patent-medicine Vendors' Defence Association (Limited). The summonses were taken against several chemists in the town for selling Fellows's syrup and fly-papers without observing the regulations of the Pharmacy Act, section 17, applicable to the first part of the poisons schedule. We reported the hearing last week.

In giving his decision in these cases at the Oldham Court on Thursday, the Magistrate said: With regard to sale of Fellows's syrup, the case of the Pharmaceutical Society *v.*



Piper & Co. makes it quite clear, although that case was decided under the fifteenth section. The restrictions contained in the seventeenth section, with which we are dealing, are not confined to the sale of scheduled poisons in their simple state or of preparations of such poisons, but are extended to the sale of a compound containing a scheduled poison as an ingredient. The case of the Pharmaceutical Society v. Armston confirms this decision, and must be regarded as overruling the views of Mr. Justice Lush in *Berry v. Henderson*. There the learned Judge, interpreting the seventeenth section, said: "I observe the schedule seems to treat all poisons as sold in their simple state or in some form of preparation alone; it does not appear to contemplate any of them being mixed with other ingredients." The case of the Pharmaceutical Society v. Delves decides that if the quantity of poison in the ingredient is so small as not to be destructive or seriously injurious to life, the seller is not liable under the Act. The analyst showed that Fellows's syrup contains in 4 oz. sufficient strychnine to destroy human life, so it follows that it comes within the scope of the Act, and the person selling must comply with the requirements. As the object of the body which complainant represents is simply to establish that defendants have infringed the Act, it is unnecessary to inflict more than a small penalty in one case against each defendant of 20s. and costs. The rest of the syrup cases will be dismissed. There are grave doubts as to whether the defendants are liable to be convicted of three offences for one sale.

We are advised that the fly-paper cases do not come within the scope of the Pharmacy Act, and we dismiss them.

Mr. Sixsmith, for the complainant, applied for cases to be stated for the higher Court as regards the summonses dismissed, and this was granted.

### NEW BOOKS.

THE following new books of interest to readers of THE CHEMIST AND DRUGGIST have been published recently. Mention of a publication in this list does not preclude a subsequent review of any book.

Behring, Professor. *Die Bekämpfung der Infektionskrankheiten*. Large 8vo. Illustrated. Pp. xxxi. and 493. 8m. (Georg Thieme, Leipzig.)

Bigelow, Horatio R., M.D. Phila.—*An International System of Electro-Therapeutics*. Unpagged (about 1,000). 8vo, cloth cover. 34s. (The F. A. Davis Company, Philadelphia and London.)

Derham, Benjamin, M.D. *Proof-spirit and Fiscal Hydrometry*. Small 8vo. Cloth. Pp. 82. 3s. 6d. (John Heywood.)

Dewèvre, Dr. A. *Recherches sur le Cubèbe et sur les Pipéracées qui peuvent s'y trouver*. Extrait des Annales publiées par la Société royale des sciences médicales et naturelles de Bruxelles. Pp. 64. (Bruxelles: Henri Lamertin.)

Flückiger, F. A., Ph.D., M.D. *Reactions: a Selection of Organic Chemical Preparations important to Pharmacy in regard to their behaviour to commonly used Reagents*. Authorised English edition. Translated, revised and enlarged by J. B. Nagelvoort. With portrait and autograph letter of the author. (Parke, Davis & Co., Detroit, U.S.A.)

Frankland, P. and Mrs. *Micro-Organisms in Water: their Significance, Identification, and Removal*. 8vo. 16s. net. (Longmans.)

French, Herbert H., Superintendent, Patents Branch, Revenue and Agricultural Department, Government of India. *The Indian Patenters' Guide: a Manual for the use of persons desiring to protect Inventions or register Designs in India*. 3r., or cloth bound, 3.8r. ("Star" Press, Calcutta.)

Garrigues, H. J. *A Text-book of the Diseases of Women*. 8vo. 21s. (Hirschfeld.)

Jeans, J. S. *Trusts, Pools, and Corners as affecting Commerce and Industry: an Inquiry into the Principles and Recent Operation of Combinations and Syndicates to limit Production and increase Prices*. Post 8vo. Pp. 196. 2s. 6d. (Methuen.)

Malten, M. A. *Anwendungsformen der Wasserkur im Hause, nach den Grundsätzen von Pfarrer Seb. Kneipp*. Second enlarged edition. Pp. 22. Illustrated. (Friedr. Spies, Baden-Baden.)

Malten, M. A. *Medizin und Naturheilkunde, Allgemeine Betrachtungen und Belehrungen*. Pp. 31. (Friedr. Spies, Baden-Baden.)

Mantegazza, Paolo. *The Art of Taking a Wife*. Small 8vo. Cloth, gilt top. Pp. 310. 5s. (Gay & Bird.)

Martindale, W.—*Analysis of Twelve Thousand Prescriptions*. 8vo. Paper covers. Pp. xiv. and 427-504. 2s. 6d. net. (H. K. Lewis.)

Phillips, O. D. F.—*Materia Medica and Therapeutics: Inorganic Substances*. Second edition. 8vo. Pp. 904. 21s. (Churchill.)

*Physiology*. Part IV.: *Digestion (including Mouth, Stomach, Pancreas, and Liver)*. Post 8vo. Pp. 64. 1s. net. Catechism Series. (Livingstone, Edinburgh, and Simpkin & Co., London.)

Schroter, L., and Schroter, Dr. C. *Coloured Vade-Mecum to the Alpine Flora; for the Use of Tourists in Switzerland*. 170 Coloured Alpine Flowers. Fourth edition. Crown 8vo. 7s. (Nutt.)

Smith, G. Barnett. *Leaders of Modern Industry*. 7s. 6d. 8vo. Cloth. Pp. 488. (W. H. Allen & Co.)

*Soapmakers' Directory*: being a List of the Manufacturers of Soap in Great Britain, with some of those in Ireland. Fifth edition. 8vo. 1s. 6d. (Simpkin & Co.)

Sonntag, C. O. *A Pocket Flora of Edinburgh and the Surrounding District*. With Map. 12mo. 3s. 6d. net. (Williams & Norgate.)

Trimble, H. *The Tannins*. Vol. II. 12mo. Pp. 172. \$2. (Lippincott, Philadelphia.)

Symons, W. H. *Chemical Laboratory Labels*. Part I. Common reagents. (Gallenkamp, 2 Cross Street, E.C.) [Consists of over 200 labels for common reagents, and includes a special set to meet the requirements of the Science and Art Department's nomenclature.]

V. Fischer-Benzon, Professor. *Altdeutsche Gartenflora. Untersuchungen über die Nutzpflanzen des deutschen Mittelalters, ihre Wanderung und ihre Vorgeschichte in klassischen Alterthum*. Large 8vo. Pp. x. and 254. 8m. (Lipsius & Fischer, Kiel.)

Wood and Bache. *The Dispensatory of the United States of America*. Seventeenth edition, thoroughly revised and largely rewritten, with illustrations. By H. C. Wood, M.D., LL.D., Joseph P. Remington, Ph.M., F.C.S. and Samuel P. Sadtler, Ph.D., F.C.S. Large 8vo. Pp. xlv + 1930. Cloth, 17. 16s. (J. P. Lippincott Company, Philadelphia.)

### DEEDS OF ARRANGEMENT.

The following deeds of arrangement with creditors have been filed at the Bills of Sale Office, under the provisions of the Deeds of Arrangement Act, 1867. Some of these deeds are for the purpose of carrying out compositions with creditors (and such are specified below), but the great majority of them are "assignments" in the ordinary form, to a trustee or trustees, for the benefit of creditors. The Act referred to expressly provides that registration shall not give validity to any deed which is an act of bankruptcy, and there is no provision in the Act making any of these arrangements binding upon dissenting creditors.

Robinson, Thomas, & Sons (Thomas Robinson, trading as), The Clayton Chemical-works, Clayton, near Manchester, chemical manufacturer. Trustee, Milsom Ormrod, 46 Brown Street, Manchester, chartered accountant, with a committee of inspection. Dated, May 29; filed, June 4. Unsecured liabilities, 1,019l. 14s. 4d.; estimated net assets, 4,030l. 4s. 1d.; creditors fully secured, 1,325l. 15s. 11d. The following are scheduled as creditors:—

	£	s.	d.
Bennett, J. J., Manchester .. ..	142	3	0
Bowers, W. H., Manchester .. ..	17	16	1
Bradford Colliery Company, Manchester .. ..	72	1	1
Bramwell & Fern, Manchester .. ..	154	3	4
Brownhill, J. & A., Manchester .. ..	39	8	4
Dukinfield Coal Company, Manchester .. ..	18	18	7
Higginbottom & Co., Manchester .. ..	52	3	9
Knowles, A., & Co., Manchester .. ..	24	12	0
Lindsey, C. R., & Co., Manchester .. ..	30	0	0
Ormrod, M., Manchester .. ..	33	0	0
Robinson, George, Manchester .. ..	200	0	0
Robinson, J., Manchester .. ..	840	0	0
Robinson, Mrs., Clayton .. ..	123	0	0
Scholfield, C. J. (Limited), Clayton .. ..	291	1	9
Taylor & Locki, Manchester .. ..	17	7	6
Tennants & Co., Manchester .. ..	17	6	8
Tyson & Bralley, Chesterfield .. ..	17	13	9
Wainhouse, T., & Co., Manchester .. ..	76	1	5
Wright, T. E., Manchester .. ..	18	15	8

Walton, Frederick George, Bank Top, Darlington, chemist and druggist. Trustee, John T. Hall, Darlington, chartered accountant. Dated June 1; filed June 7. Unsecured liabilities, 456l. 1s. 10d.; estimated net assets, 1712l. 10s. 8d.; creditors fully secured, 13l. The following are scheduled as creditors:—

	£	s.	d.
Bourne, Johnson, & Latimer, London .. ..	14	1	7
Currie & Hutchinson, Newcastle .. ..	11	13	2
Davy, Yates & Hicks, London .. ..	13	12	10
Eynns, Sons & Co., Liverpool .. ..	17	11	3
Lofthouse & Co., Hull .. ..	29	16	0
Raines & Co., York .. ..	19	2	0
Robinson, James, Darlington .. ..	14	0	5
Walton, E. B., Richmond .. ..	109	0	0



## New Companies and Company Reports.

**DORWARDS (LIMITED).**—Capital 5,000*l.*, in 1*l.* shares. Object: To acquire the business of manufacturer of hop-bitters, cordials, non-alcoholic ale, mineral and aerated waters hitherto carried on at Darlington and Wilmington, county Durham, by Dorward & Sons, and to carry on and extend the same. The first directors are:—F. Cohen, Apsley House, Darlington, merchant; J. Shutt, Bondgate, Darlington; W. Roce, Newgate Street, Bishop Auckland; A. Cooke, Newgate Street; D. K. Dorward, jun., Wesley Street, Wellington, aerated-water manufacturer. Registered office, Bridge End, Darlington.

**JOSEPH WOOD & CO. (LIMITED).**—Capital 4,000*l.*, in 10*l.* shares. Objects: To acquire and carry on the businesses of surgical instrument makers and dealers, truss-makers, cutlers, opticians, &c. The first subscribers (who take one share each) are:—J. Russell, 22 Spurriergate, York, optician; H. Russell, same address; Mary S. Pratt; Annie C. Wrightson; Maggie Russell; B. Theakstone, 48 Russell Street, York, traveller; J. Biscoomb, 7 Tower Street, York, builder; C. Kilvington, 45 Hutton Street, Moss Side, surveyor; C. Anderson, 15 Coney Street, York, clerk. The first directors are J. Russell, H. Russell, and B. Theakstone. Remuneration: 2*l.* per week to each of the former, and 2*l.* 10*s.* to Theakstone.

**THE DIRECTORS OF LIEBIG'S EXTRACT OF MEAT COMPANY (LIMITED)** notify that an additional dividend for the year 1893 of 2*l.* per share, tax free (making, with the interim dividend, 15 per cent. for the year), will be payable on June 30. Warrants will be forwarded on June 29 to the proprietors registered on the company's books on June 21.

**THE LIQUOR CARNIS COMPANY (LIMITED).**—An application for the appointment of a receiver and manager of the above company was heard on Friday, June 8, by Mr. Justice Stirling, in the Chancery Division of the High Court. Mr. Hamilton, who appeared for the plaintiff, Mr. Uthoff, said his client held ten first mortgage debentures in the company, which was formed with a capital of 50,000*l.* in order to purchase certain patents for the manufacture of an extract of meat. During the four years of the company's existence over 4,000*l.* had been lost, and now there had been default in payment of interest on the debentures. The only assets were the patents and the goodwill, the latter supposed to be of some value, over 4,000*l.* having been spent in advertising the company's particular preparation of meat. Mr. Romer appeared for the company, but as they did not oppose the motion, the usual order was made.

**ELECTRO-CHEMICAL COMPANY (LIMITED).**—The first ordinary general (statutory) meeting of this company was held, on Tuesday last, at the Cannon Street Hotel, London Colonel Holland, C.B., presiding. The Chairman said that the allotment of shares was made three months ago, and, owing to the large amount of organisation work, and details to be gone through, they had not been able to conclude the purchase of land for the works, and until they were in actual possession they would not be able to complete contracts for buildings, plant, and machinery. They had allotted 16,745 preference shares, representing 83,725*l.*, and 14,000 ordinary shares, representing 70,000*l.*, making together 153,725*l.* of the capital of the company. The intention, in the first instance, is to put up and work machinery for an output of 5,000 tons of caustic soda and bleach. Samples of soap made with electrolytic caustic soda by the company's process by Messrs. J. C. & J. Field were shown to prove the practicability of making the best caustic soda and bleach by electricity.

## MARRIAGES.

**CHARRINGTON—MORTIMORE.**—On June 5, at Holy Trinity, Birchfield, Cannock Chase, by the Rev. H. J. Peers, M.A., Mr. William Charrington, chemist and druggist, Lichfield, to Miss Helen Bambridge third daughter of Mr. Henry Mortimore, of Handsworth.

**FLETCHER—WOODS.**—On June 14, at the Wesleyan Chapel, Harrogate, by the Rev. Thos. Bolton, William Henry Fletcher, chemist and druggist, of Spilsby, to Elizabeth (Lily) Wilsford Woods, of Harrogate.

**HALL—PADWICK.**—On June, 12, at Brighton Parish Church, Mr. Arthur Hall, only son of Mr. E. Penfold Hall, of Warwick Mansion, King's Road, Brighton, to Winifred, second daughter of Mr. John Padwick, pharmaceutical chemist, 5 Preston Street, Brighton.

**SCROGGIE—FORBES.**—At the Palace Hotel, Aberdeen, on June 6, by the Rev. J. Mitford Mitchell, D.D., West Parish Church, John H. Scoggie, chemist, Lauder, to Margaret Maria, eldest daughter of the late Alexander Forbes, M.D., Aberdeen.

## DEATHS.

**BROWN.**—On May 22, Peter Brown, chemist and druggist, of Shotley Bridge, Durham. Aged 69.

**COTTINGHAM.**—On June 7, Alderman W. Cottingham, chemist and druggist, High Street, Lincoln. Aged 74. Deceased had been ill for nearly two years, but died suddenly from dyspepsia. He was a native of Snarford, served his apprenticeship with Mr. Casterton, of Market Rasen, and after carrying on business at Bassingham, went to Lincoln in 1846. Since 1866 he was a member of the Town Council, in 1877 he served as Mayor, and in 1880 was elected an alderman. He was a member of the Board of Guardians, an Overseer of the Poor, a member of the Burial Board, and for 45 years a local preacher in the United Methodist Connexion.

**DIXON.**—On May 8, Henry Benjamin Dixon, chemist and druggist, late of Hanley. Aged 40.

**FELL.**—On May 28, William Wilks Fell, chemist and druggist, of Emley, Yorks. Aged 68.

**HAYWARD.**—On May 23, after a long and painful illness, Martin Luther Hayward. Aged 67. Mr. Hayward, who was born in Sudbury, Suffolk, was apprenticed and served his time with Mr. Barker, chemist, in that town. For the last forty-nine years he was in the employ of Messrs. Davy, Yates & Routledge, wholesale druggists, of Park Street, Southwark, London. His loss is much regretted by the members of the firm, as well as by all the employés.

**RENOUF.**—Mrs. Renouf, the wife of Mr. F. Renouf, jun., of the drug-stores, Jersey, died on June 10. The deceased lady, who was the mother of a large family, and had latterly returned from a voyage to visit her parents in New Zealand, had suffered severely from rheumatic gout.

**TURTON.**—Mr. Thos. Wm. Turton, chemist and druggist, Stockton Heath. Aged 27. Mr. Turton was found dead in bed. He had been troubled with neuralgia, and took chloroform for relief, and on his bed was found a bottle half full of this drug.

**WHITEHEAD.**—Mr. Samuel Henry Whitehead, who died at his residence, 2 Perth Street, Cheetham, Manchester, on May 11 last, was well known and highly esteemed by a large number of chemists in the Manchester district. Mr. Whitehead was born in Rochdale, and served his apprenticeship in his native town with Mr. Green, chemist, after which he went to reside in Manchester, and for more than twenty-five years represented the well-known firm of Mr. W. Mather, of plaster renown. On the death of Mr. Mather he commenced business, in partnership with Mr. Holbrook, in the druggists' sundries line, which, however, did not prove a success. During the past eight years, and until a few weeks prior to his death, he represented Mr. E. Taylor, of Salford. Of late years he had been very infirm, having had a succession of paralytic seizures—the first seven years ago, while on a journey at Wolverhampton—each one rendering him more feeble and unfit for business. Nevertheless, he plodded on long after he was unfit for work. Some of Mr. Whitehead's old friends are getting up a subscription to assist his family, who are in straitened circumstances, and we are asked to state that Mr. Oldfield (Oldfield, Pattinson & Co.), of Manchester, will be glad to receive any contributions to this fund which old acquaintances may think proper to send.



## Trade Notes.

MESSRS. G. B. KENT are bringing out in several styles a combination "comb-brush." This is a patent described as Hawtin's. The comb proper reaches half-way along the



construction, and a row of bristles fill up the remaining space. The brush is not of much effect on a bushy head of hair, but with thin crops it can no doubt be employed to advantage.

MESSRS. WARRICK BROTHERS, of 18 Old Swan Lane, E.C., send us a specimen box of improved Bland's pills, which they bring into trade under the name of Iron Jelloids. The special advantages claimed for the Jelloids is that in them the ferrous carbonate remains in an unalterable state—in other words, is not converted into unassimilable ferric carbonate, as often happens with the ordinary Bland's pill. When cut the Jelloids show a pale greenish-grey colour, indicating that the ferrous carbonate is present in them in an unoxidised condition.

THE brush illustrated below will be found of great use for many purposes. The handle of the brush is an airtight metallic reservoir, in which paste, gum, stencilling-ink, blacking, or varnish may be stored. The brush itself is fed



with the gum or whatever is being employed, by the operator occasionally pressing the button at A. The brush part screws on to the barrel, and new ones can be fitted at a cheap rate. Messrs. A. & E. Etches, of 74 Albion Street, Leeds, are the patentees and manufacturers of this brush.

STORE PRICES.—The Army and Navy Co-operative Society (Limited) show the following reductions in prices in their circular for June:—Beecham's pills, to 9½d.; Bishop's citrate of magnesia, to 2s. 4d.; B. W. & Co.'s phenacetin tabloids, to 8½d. and 2s.; citrate of iron and quinine (Howards') to 8d.; Dinneford's fluid magnesia, to 2s. 10½d.; Geraudel's pastilles, to 11d.; hazeline ointment, to 8½d.; Henry's calcined magnesia, to 2s.; "Izal," to 10½d. and 2s. 3d.; Mellin's emulsion, to 1s. 9d. and 3s. 6d.; vaseline (per 5-lb. tin), to 4s. 2d.; eau de Cologne (No. 4711), to 1s. 9d.; Wyeth's beef-juice, to 2s. 8d.; Carnrick's liquid peptonoids, to 4s. 9d.; Himrod's asthma-cure, to 2s. 7d.; Kemmerick's peptones, to 1s. 9d.; nitrate of silver (per oz.), to 2s. 8d.; Pond's extract, to 1s. 6d. and 3s.; Whelpton's pills, to 9½d. and 2s. 1d.; Seabury's isinglass-plaster, to 1s. 7d. silk, 1s. per yard muslin; Rooke's solar elixir, to 8s. 6d.; salt regal, to 1s. 7d.; Atkinson's perfumes, to 6s. 9d.; Coffin's dentifrice, to 1s. 3d. Jeyes' perfect purifier has been advanced to 8d., and the sanitary powder to 6d. Some alterations similar to those mentioned in a Trade Note last week have also been carried out.

HOLBORN UNION DISPENSARIES.—Mr. George Elade (Chairman of the Dispensaries Committee) presented a report to the Holborn Board of Guardians at their meeting on Wednesday, in which it was shown that the dispensaries are in good order and drugs of uniformly good quality. The committee recommended that many of the bottles be re-labelled. The report was adopted.

TANNACA TOILET-POWDER.—The Burmese use the bark of *Calamett cordia fragrantissima* powdered and strained, or ground down with rose-water into a paste, for the same purposes as the toilet-powder of Europe or the santal-paste of India. It is said to be an excellent substitute for either of them, and is in demand by other nations of Asia. It prevents the face and hands from being sunburnt, and creates a cooling sensation, besides giving a false fairness to the fair.

## Personalities.

MR. R. WRIGHT, chemist, of 11 Eagle Parade, Brixton, has been elected a Fellow of the Chemical Society.

MR. JAMES HODGSON, 201 Brixton Hill, and 17 Little Trinity Lane, E.C., manufacturing stationer, wishes us to state that he is not the "J. Hodgson, Brixton Hill" who is scheduled as a creditor for 791l. 15s. 9d. in the bankruptcy of Messrs. H. Gilbertson & Co.

A BRITISH COMMITTEE, of which Sir Douglas Galton, K.C.B., F.R.S., is the Chairman, and Professor W. H. Corfield, M.A., M.D. (Oxon.), the Treasurer, has been formed to further the interests in this country of the eighth International Congress of Hygiene and Demography, which is to be held in Budapest from September 1 to 8 next. Information about the Congress may be obtained from the Hon. Secretary, Dr. Paul F. Moline, 42 Walton Street, Chelsea, S.W.

## Business Changes.

MESSRS. JAMES A. BECK & SON, of Belfast, have removed their offices and stores to Dalton Street, Bridge End, Ballymacarett.

MR. ARTHUR W. E. DONELLAN has purchased the pharmacies at 43 Nantwich Road and 6 Victoria Street, Crewe, lately carried on by Mr. A. P. Newman.

MR. J. H. PUMPHREY, pharmaceutical chemist, Beneworth, has purchased the chemist's and druggist's business carried on at 59 High Street, Evesham, by Mr. J. P. Alcock.

MR. A. ENOCH, from Messrs. George & Welch, Worcester, has purchased the chemist's business at 124 High Street, Tewkesbury, formerly carried on by Mr. Walker, and afterwards by Mr. Fulcher.

THE CHEMIST'S BUSINESS of Messrs. Reeler & Sons, Adderley Street, Cape Town, has been purchased by Messrs. Heynes, Matthews & Co., of that city, for 1,820l. The valuable site and premises in which the business has been carried on thus far have been secured by a neighbouring draper for 10,750l.

MR. JAS. B. HAY, chemist, of 8 Coventry Street, Piccadilly, W., has relinquished his interest in the firm of J. B. Hay & Co., and has disposed of the business to Mr. T. A. Mitchell, late manager for Messrs. Mellin & Co., who will carry it on under the old style. The transfer includes Mr. Hay's three businesses at Coventry Street; Railway Approach, Charing Cross; and Wellington Street, Strand. Mr. Hay intends to start an "International Pharmacy" in the City.

AT the Royal Society's conversazione, on Wednesday evening, several striking scientific novelties were exhibited. Mr. J. W. Swan has produced a continuous gold leaf by electrical deposition; the glass plates, coated with it, flash like yellow mirrors in reflected light, but transmit a greenish light when looked through, illustrating the perfect transparency of thin gold. Mr. T. Svedekor, to illustrate the practical application of electricity, showed a light quilt, which may be made to any size, the interior containing resistances to generate heat when a current passes, thus keeping up a uniformly high temperature in the fabric for any time. On a smaller scale the contrivance may be applied instead of hot poultices and fomentation. The invention is specially for hospital use. Several new photographic processes were exhibited, among them being a new attempt by Mr. W. Kurtz to reproduce in natural colours. Excellent effects were produced by printing four photographic blocks in the three primary pigments, superimposed one on the other. Lord Kelvin exhibited a structure of hexagonal prisms like children's bricks to illustrate the molecular structure of crystals.



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TO THE B. P. METHODS, AND WE FIND THAT THEY ARE  
PRACTICALLY IDENTICAL IN CHARACTER."

## Editorial Comments.

### DENTISTS' CLAIMS.

It is much to be desired that a limit to the claims put forward by the British Dental Association should be authoritatively drawn somewhere. We report several prosecutions instituted by that body this week. The Magistrates seem in most cases disposed to accept their interpretation of the Act as if it were an official one. It is not for us to say that the claims are unfounded, but we may hold the opinion that they should be fully contested. It appears by the reports that the Association claim that the use of the words "dentorium" and "dental dépôt" constitute infringements



of the Act. The Manchester Magistrates adopt that view in regard to the first-quoted description, while those at Lancaster fine a chemist who exhibited the description "Dental depôt; teeth extracted," though it does not clearly appear whether this was regarded as the essential feature of his offence, or whether it was only regarded as a part of his general tendency to compete with qualified dentists. For one thing it appears that he had succeeded to a doormat on which the word "dentist" appeared, his predecessor in the same shop having been entitled to use that description. This defendant said the offending mat had always been kept face downwards since he had had the business. He had also, it appears, made references to his dental practice in some of his advertisements.

The question whether descriptions such as those we have quoted can be construed into offences against the Dentists Act depends entirely on the interpretation of the third section of that Act. This provides that a person not registered under the Act "shall not be entitled to take or use the name or title of dentist (either alone or in combination with any other word or words), or of 'dental practitioner,' or any name, title, addition, or description implying that he is registered under this Act, or that he is a person specially qualified to practise dentistry." By the Medical Act, 1886, section 26, it is declared that the offence may be created by the use of letters as well as by the use of words. The question we should like to see submitted to the High Court, therefore, is this: Does the public description of a shop as "dental depôt" or "dentorium" express or imply that the person using such a description is registered under the Dentists Act, or is specially qualified to practise dentistry? The British Dental Association's contention that it does seems to us a great deal too free, and we should like to hear the point well argued.

Let it be understood that the Dentists Act nowhere prohibits anybody from extracting teeth or doing any dental work. It merely provides that he shall not misrepresent himself. Moreover, until 1878, when the Act was passed, it was in no sense a legal misdemeanour for anyone to describe himself as a dentist. The offence is one created by Act of Parliament only, and is not to be looked upon as a crime obvious to everybody's unenlightened understanding. Twenty years ago it was as free to anybody to describe himself as a dentist as it is now for him to call himself a grocer. It is not, therefore, for magistrates to make the Act mean more than it clearly says. They must interpret its terms strictly, and they ought to defend very jealously the rights of the community against the demands of associations whose direct interest it is to get out of the Act all they can. The Pharmacy Acts and the Veterinary Surgeons Act contain sections corresponding to that we have quoted from the Dentists Act; but it has never been assumed that we could prevent unregistered persons using the description "drug-store" or "drug-depôt," and when the Veterinary College tried to stamp out the use of the phrase "veterinary chemist," and the stampee met them in square fight, their claim was seen to be as ridiculous as it was illegal.

The truth is, there is rather too much attempt going on just now to twist laws intended merely to provide protection for the public into statutes for the protection of a profession. We should like to see the British Dental Association challenged in the High Court on the clear issue which they have themselves raised, and we will ourselves contribute to a fund for settling the point, though we are not disposed to undertake the responsibility of contesting it after our experience of the widespread apathy among those directly concerned in the veterinary-chemist case.

## SALICYLIC ACID.

SINCE, a few weeks ago, the eight or nine German factories that compose the syndicate of manufacturers of salicylic acid and salicylates suddenly reduced the official quotations of their preparations by about twenty-five per cent. the commercial position of this important drug has undergone no further alteration. The joint action by the syndicate, as we explained at the time, was the result of the conviction which had gradually imbued all its members that only heroic measures could save the ring from complete disintegration. One or two firms who commenced the manufacture of salicylates after the formation of the syndicate that has so long controlled the market, no doubt greatly to the benefit of its members, had begun to cut the syndicate prices very seriously. It is alleged that the outside firms had not succeeded in booking many orders yet, but their steady underbidding, besides being extremely irritating to the syndicate, must, in the long run, have rendered the maintenance of the artificial ring quotations impossible. Hence the old policy which has scored many successes in the past was once more resorted to, and the syndicate firms suddenly and jointly dropped their price to a figure at which they believed it would be impossible for the "outsiders" to remain in the market. It seems, however, that the non-syndicators are still in the field, pugnacious if weakened, and continue slightly to underbid the reduced syndicate price. It may be taken for granted that the combined firms themselves cannot continue the war much further upon the present tactics, and we may, therefore, soon expect either an announcement that the firm against whom their procedure is aimed has been rendered harmless by absorption or otherwise, or signs of a breaking-up of the syndicate and a return to the old Manchester-school method of unrestricted competition, with the ultimate crushing out of the weaker firms. From a consumer's point of view the last-named eventuality would be the most desirable one, but the manufacturers will no doubt be better pleased if they succeed in restoring a close competition which gives them a firm grip on the market and the chance of earning fat profits. Anyway, the course in which the market will shape itself cannot remain uncertain very much longer.

Salicylic acid, although its commercial history may be said to date back only about twenty years—i.e., since carbolic acid superseded the willow, meadow-sweet and wintergreen as the source of manufacture of the drug—has experienced a great many vicissitudes. First there was the prolonged litigation concerning the validity of Kolbe's patents for the preparation of synthetic salicylic acid between a Dresden and a Berlin pharmaceutical factory, in the course of which the drug was considerably cheapened and its purity increased. Then came a period of growing popularity in medicine, during which salicylate of soda earned the qualification of "the poor man's quinine," and an immense growth in the consumption of the acid as a preservative. The patent-litigation ended in 1877 in a compromise, under which the Dresden factory granted a licence for the preparation of the drug to its former foe in Berlin, and the selling-price was regulated by agreement between the two makers. Those were the first happy years of the embryo convention. The Austrian Pharmacopœia, we believe, was the first to grant recognition to the acid, but gradually it and its chief derivative, salicylate of sodium, were incorporated in most other official works of this class. In the beginning of 1881 a French Minister of Commerce, who has since gone into the limbo of oblivion which shelter so many scores of his colleagues, obtained temporary notoriety by issuing a circular prohibiting the use of all alimentary substances or beverages preserved by means of



salicylic acid. This circular was admittedly aimed against the importation of German beer into France, and succeeded in raising a bitter and prolonged controversy on the question of the injuriousness or innocuousness of the acid. The measure, however, had the effect of seriously injuring the sale of the drug, and the adoption of similar prohibitive measures in Bavaria, a couple of years later closed another considerable outlet. But in spite of these obstacles the consumption of the salicylates was not permanently injured; on the contrary, it has constantly increased, and is still, it is believed, growing steadily.

In 1888 Kolbe's patent, having had the legal fifteen years' run, expired, and the preparation of the acid and its derivatives was at once taken in hand by several firms in Germany, with the result that the price quickly fell by about 20 per cent. The total export of salicylic acid and salicylates from Germany (by far the largest producer) was at that time about 190 tons per annum. From that time up to the present the convention, or syndicate, as we now know it, has been in active existence. It has been compelled gradually to admit new manufacturers as they started, in order to keep the price from being lowered to the point of non-productiveness, and it is notorious that at present there are so many manufacturers that each fresh attempt of the syndicate to preserve its domain from intrusion by fresh competitors severely strains the loyalty of some of the makers. Whether the recent desperate move will be the straw that will break the back of the syndicate-camel remains to be seen.

### DISPENSATORIES.

In January, 1833, Dr. Geo. B. Wood penned the preface to the "United States Dispensatory." Two months ago the preface to the seventeenth edition was written by his successors, Professors H. C. Wood, Joseph P. Remington, and Samuel P. Sadtler. During the sixty years' interval many things have happened which have changed the aspects of medicine and pharmacy, but there is probably no event so remarkable as the disappearance of "Dispensatories" from English medical literature. In their first preface Dr. Geo. B. Wood and Dr. Franklin Bache expressly stated that they modelled their book upon the dispensatories which were at that time familiar and popular in this country—viz., "The Edinburgh New Dispensatory," by Andrew Duncan, M.D., and "The London Dispensatory," by Anthony Todd Thomson, M.D. These works were then almost as familiar in the United States as in the United Kingdom, but pharmacy had begun to take American lines, and a United States Dispensatory became a necessity. Since that time dispensatories have grown in popularity in the United States. With us they are now hopelessly out of date, and, doubtless, the majority of persons in medicine and pharmacy do not even know the names of the great books from which their predecessors a generation or two back imbibed their professional wisdom.

The history of English dispensatories and the biographies of the men who made them are subjects fruitful for research and comment, and this remark is not made in reference to the earlier editions of the Pharmacopœias which were called dispensatories. The great Culpeper will head the list; his translation of the London Pharmacopœia, "with animadversions," appeared in 1653. This book was the "Squire" of its day, and held its position until the close of the seventeenth century, when, in 1696, William Salmon's "New London Dispensatory" took up the running. Both Culpeper and Salmon were men of humour, and many an entertaining hour can be passed over their quaint phrases and astonishing

science. Quincy (1717) is almost modern compared to them, but he lived in a profession which was still behind the age, and even his immediate successors, Pemberton (1746) and Lewis (1753), had to struggle with a materia medica possessing much that was unsavoury and superstitious. There was not much elegance in medicine at the close of the eighteenth century, but the beginning of the nineteenth brought us the two remarkable works which Dr. George B. Wood mentions. Dr. Andrew Duncan, jun., the forerunner of Christison in Edinburgh, published his "Edinburgh New Dispensatory" in 1803, and it had run into six editions before Dr. Anthony Todd Thomson brought out his "London Dispensatory" in 1814. This ran through eleven editions, the last, published in 1852, ending the long line of dispensatories published in this country. Christison's "Dispensatory" was the Scotch contemporary work, but it only saw two editions, published in 1842 and 1848. Christison's and Thomson's works are pharmacological classics, and they still suffice to couple the present with the best of the past.

Why have English dispensatories fallen into neglect after two centuries of usefulness? Probably two circumstances are accountable: first, the individuality in the series; and second, the marked differentiation of medicine and pharmacy. From Culpeper to Thomson there is a straight line of new men, each of whom may be said to have taken his predecessor's work, infused into it new knowledge, and given it his own name. So when we come to the eleventh edition of Thomson, we find A. B. Garrod acting as editor, and by this time the claims of medicine are so distinct from those of pharmacy that new literary treatment becomes necessary. Therapeutics was then seeking divorce from pharmacognosy. In 1855 Garrod published his "Essentials of Materia Medica, Therapeutics, and the Pharmacopœias." When Christison succeeded Duncan at the Edinburgh University, he was expected to bring out a new edition of Duncan's "Dispensatory." Instead of that he produced his own, and gave good reasons for so doing. His book was less pharmaceutical, strange to say, than Duncan's, and he gives as a reason that "a treatise on pharmaceutical operations, in order to be useful, must be far more comprehensive in its details than has been felt by prior authors to be compatible with the limits of a Dispensatory for the ready reference of practitioners and druggists." Yet Christison's book was very popular with druggists. His pharmaceutical inspiration was Geiger's "Handbuch der Pharmacie," a work now unknown in England, and he drew liberally from the knowledge of Edinburgh pharmacists. To Christison succeeded Scoresby-Jackson—a Scottish Garrod—and there the tale of Edinburgh Dispensatories ends. Squire and other pharmacists came into the field, cultivating for their kind.

When we turn to the seventeenth edition of the "United States Dispensatory," we cannot help regretting our lost literature. Yet regret is mixed with an element of joy, for a volume of nigh 2,000 pages is a heavy responsibility to its possessor. Of course, had London, and not Philadelphia, produced it, there would have been two volumes—a division of responsibility which commends itself strongly to the hearts of Englishmen. But this is a detail. Professor Wood and his colleagues give us a worthy volume. It is full of "wise saws and modern instances," may we say?—for there is a strain through it of the knowledge which has accumulated from 1833, and before that, to the present day. Herein is one of the Dispensatory's particular charms. History is always interesting, whether it be of men, manners, or medicine. It is for that reason that one can pore over old volumes of *THE CHEMIST AND DRUGGIST* until the day dawns, and it is one of the chief attractions of "Pharmacographia." Perhaps it may be objected to the Wood and Bache his-



tory that it is constructed on the cumulative principle—a sort of patchwork of old and new facts. This is true to a certain extent, and thus far we believe that the editors have been wise in retaining pieces of antiquated information. There is no exactly similar treatment of materia medica in English literature, and it is, on the whole, a book which we should not like to go the way of English dispensaries. For the benefit of those who are not familiar with the volume we may state that the "United States Dispensatory" consists of three parts, the first two pertaining to official and unofficial pharmacy. In the first part the United States and British Pharmacopœias are the basis. This is a circumstance which English pharmacists should particularly note. English pharmaceutical literature appears to be as familiar to the editors as American, so that recent contributions are freely quoted throughout the volumes. Following the U.S.P. the editors give the accentuation of all heading words, thus:—AS-CLE'PI-AS, LI'QUOR AN-TI-MŌ'NI-I CHLŌ'RI-DI, EL-A-TE-RI'NUM. Accentuation is not extended to English words. In treating the materia medica the source or method of preparing a medicine is detailed (it is here that many interesting historical notes come in); then come paragraphs on "properties," meaning thereby the physical or chemical; and, lastly, "medical properties and uses." The order of the Pharmacopœias is followed throughout, not the old Dispensatory method of grouping together a drug and its preparations. The volume is of much greater importance to chemists and pharmacists than to physicians, as the therapeutic sections are scarcely full enough for the latter. The second part is divided into two sections, the first comprising the "National Formulary," and the second unofficial drugs and medicines, in which are hundreds of "new remedies," including the most recent. There are about 250 double-column pages of this. The third part of the book deals with tests. The work of the editors in producing this edition has been confined chiefly to adapting it to the new U.S.P., and bringing it into line with present knowledge. Some articles, notably "Cinchona," have been rewritten. The cinchona article, by Professor H. H. Rusby, is one of great importance, deserving special comment, which we reserve. We have not attempted to read *serialim* from page 1 to page 1930, but we have managed a large part of it, and without going into a number of data, the accuracy of which we would dispute we have no hesitation in saying that the editors have done their work well. The "Dispensatory" is a great book in other senses than its bulk, and if it lack that individuality which we notice in Remington's "Pharmacy" and Squire's "Companion," it possesses a valuable feature in its references to the commercial and scientific literature of the past half-century. It is, in short, a healthy development of the old-time Dispensatory.

#### HULL AND ITS OIL-TRADE.

The port of Hull, which has long been the chief centre of the linseed-oil trade in this country, seems to be in imminent danger of losing that position. At any rate, the Hamburg agent of one of the largest Hull seed-crushing firms expresses that opinion in the *Eastern Morning News*. Says he:—"About ten years ago the greater portion of the linseed oil imported into Hamburg arrived from Hull, but during the last few years the imports from Hull have decreased rapidly, while the shipments of oil from London, Leith, and Holland have increased very much. This is partly owing to the comparatively high rates of freight from Hull—10s. per ton on oil, while London only charges 7s. 6d. to 6s., Leith 10s., Boston and Bristol 7s. 6d. per ton—and partly to the much higher prices of Hull oil. In the meantime some very large oil-mills

have been constructed in Harburg, close to Hamburg, and provide a very great part of Germany with linseed oil, which formerly had to be imported from Hull. The German mills send almost all their oil-cakes for sale to the United Kingdom, and compete in the English market with the English-made cakes, whilst the English oil in Germany is kept from competition by a duty of 2s. per cwt., gross weight, on the raw linseed oil and refined cotton oil." It is a pity that the trade should be leaving Hull, but we agree with the *Morning News* that the mere reduction of freight by 2s. 6d. per ton would not keep it there.

#### PHARMACY AMONG THE PICAYUNES.

The Louisiana Pharmaceutical Association have just held their annual convention at New Orleans, and the event is described by the *Daily Picayune* with much literary verve, slopped over with a hospitable portion of the piquant sauce of personality. The affable *Picayune* beheld among the pharmacists assembled at New Orleans some of the most remarkable men in the States. There was Pharmacist William Graner, "clean shaven and priestly-faced," yet with "a mouth that indicates the enjoyment of the good things of this life"—a pen-picture which at once diverts our thoughts to the oyster-swallowing *abbé* of the advertisement. The on-looker also beheld Alex. K. Finlay "smoking calmly, sitting quietly, and looking dignified." This behaviour was politic of Alex. Finlay, for, witness the silent parrot who "hadn't much of a jawr, but was a devil at thinking," habitual silence is often the surest way of securing a reputation for wisdom. Compare, for instance, in your mind's eye the imperturbable Mr. Finlay silently sucking his cigar under the eagle eye of the *Picayune* with Pharmacist A. Goodwill, also of the convention, who was "one of the most forcible speakers, and whose head seemed to bristle with well-taken points," and then say which of the two is the more dignified personality. We pass over the handsome-faced M. T. Breslau, and the spectacled F. A. Godbold (the only druggist who habitually wore glasses at the conference), and turn to an account of the business proceedings. The Louisiana chemists are dissatisfied with the pharmaceutical training given in America, and they express themselves upon the subject with much candour, as witness the following excerpt from the report:—

"The features of our popular American schools of pharmacy seem to be justly attacked. Their lack of rigidity in entrance requirements, short terms, limited amount of instruction and laboratory-work—above all that feature of so adjusting the lectures and so forth that the student might be enabled to devote the larger portion of his time to his own support."

The last sentence to the benighted Britisher appears somewhat incomplete, but we are wary of hazarding the opinion that its framer lost grip of his starting-point as he went along, for they are very severe on everybody meddling with education, are the Louisianians. And, we suppose, education includes grammar. That is also the reason why we bow our uninstructed head in silent wonder before the opening sentence of the report, which runs thus:—

"We, your committee on pharmaceutical education, has been more generally agitated during the past year than ever before in the history of pharmacy. At the international pharmaceutical congress held in Chicago last August, it became the all-absorbing topic for discussion, more time being devoted to it than to all other subjects combined. The delegates from the several countries represented spoke in favour of higher pharmaceutical education, the consensus of opinion being that not only in the United States was higher education desirable, but equally so even in the older European Governments."

Clearly our own old British Government ought at once to set about reconstructing the rules of English grammar upon Louisianian pharmaceutical lines.



## ❖: REVIEWS ❖

*The Indian Patentees' Guide.* Compiled by HERBERT H. FRENCH. Calcutta: C. J. A. Pritchard. Small 8vo. 82 + 10 pp. Paper covers. 3s.

IN some respects the granting of patents and registration of designs differs in form in India from the home practice, and this manual has been written by Mr. Pritchard for the guidance of those who wish to obtain rights in our great dependency. This is all the more necessary since other nations than our own have begun to recognise the importance of India as a market, and because imitation is perhaps not less common there than in Japan. Mr. Pritchard emphasises in his "Guide" the points in which Indian patent-law differs from the English. It may be taken as a rule, however, that what has been patented in England will be patented in India without difficulty, provided the applicant furnishes an address in British India. This is not compulsory, but it is to the applicant's advantage. Patent-rights are granted for fourteen years, and the total fees, payable before the end of the thirteenth year, amount to 790r. The conditions in Ceylon are almost identical with those of India, to which they were closely assimilated by an Act which came into force in July, 1893. The author, as superintendent of the Patents Branch of the Indian Revenue Department, speaks with authority, and he speaks to advantage.

*Die Alkalien. Darstellung und Fabrikation der gebräuchlichsten Kali- und Natron-Verbindungen, der Soda, Potasche, des Salzes, Salpeters, Glaubersalzes, Wasserglases, Chromkalis, Butlaugensalzes, Weinstein, Laugeinsteins u.s.f., deren Anwendung und Prüfung.* Von Dr. S. DICK. Vienna and Leipzig, 1894: A. Hartleben's Verlag. Second edition. 8vo. Viii. + 393 pp. Paper covers. 4m. 50pf.

THIS handbook treats, as will be seen from the title, of the manufacture or production of the more important salts of soda and potash. The author is a practical man, and he has done his work well, for he gives brief historical notes where the importance of the substances warrants that attention, his descriptions of the processes are lucid and amply illustrated, and the analytical and commercial sections are interesting and valuable. We have noted especially that his information in regard to borax, nitre, and cream of tartar has been carefully collated, and commercial men who take an interest in the scientific aspects of these important substances will value the tables which the author brings under these headings. Thus, in regard to cream of tartar, one table shows the composition of argol (white and red) derived from ten countries. It is interesting to note how variable the calcium-tartrate percentage in argol is. French argol seems to contain most, the highest being 45.92 and the lowest 6.75, while only two out of twelve samples are under 10 per cent. Austro-Hungarian argol shows the smallest percentages of calcium tartrate, only five samples out of forty being over 10 per cent. Some Italian argols are quite free from lime. These are chiefly white Tuscan argols, but one from Piedmont of the red variety is also non-calcareous. "Die Alkalien," as a whole, deals with the actual rather than the theoretical, and to those who can read German we commend it as a useful book.

*The Tannins: A Monograph on the History, Preparation, Properties, Method of Estimation, and Uses of the Vegetable Astringents.* By HENRY TRIMBLE, Ph.M. Vol. II. The tannins of oak-bark, mangrove, canaigre, and chestnut. Philadelphia, 1894: J. B. Lippincott Company. 12mo. 172 pp. 82.

THIS second volume of Professor Trimble's work on tannins is, if anything, more interesting than the first, for he is now getting into the heart of the subject, and is dealing with barks, &c., which are of great importance to tanners and dyers. More than half of the volume is devoted to oak-

tannins, which, in many respects, have almost equal industrial claims with gall-products. The history of the oaks is well treated in the first section; indeed, although the author does not pretend to treat this part of the subject exhaustively, he gives information as to the quality of oakwoods which makes the book valuable beyond its first intention. The development of our knowledge of oak-tannins is traced in the section on "history," and then follow sections on preparation and purification, properties, and estimation. Of the other tannins mentioned in the volume, chestnut-tannin, with which the author's name is especially identified, receives most attention. The index to the literature of tannins is continued.

*Fallen Angels: A Disquisition upon Human Existence: An Attempt to Elucidate Some of its Mysteries, especially those of Evil and Suffering.* By ONE OF THEM. London: Gay & Bird. 6s.

WE happen to know that the author of this work is a gentleman at the head of a large business, who, from a somewhat outside standpoint, has for many years interested himself in the affairs of chemistry and pharmacy. This is why we are favoured with a copy of his book. It is one which we cannot review in these pages, as it deals with theological and psychological speculations entirely. But we may be permitted to say that it is written in a tone as far removed from the style naturally suggested to the mind by those formidable adjectives as it is possible to imagine. There is no dogmatism, no austerity, no sermonising in it. While it is always thoughtful and reverent, it is never dull. It treats on subjects of never-dying human interest in brief, well-argued, and attractively written chapters, and gives evidence from beginning to end of wide and varied study, and well-assimilated reading.

*Law and Theory in Chemistry.* By DOUGLAS CARNEGIE, M.A. London: Longmans. 6s.

AN analyst or technical chemist can quite easily go on all his days working in his laboratory, and inventing occasionally improved methods, or it may be discovering new compounds. But if he should be possessed with genuine scientific enthusiasm or endowed with any curiosity, he must inevitably desire to penetrate the mysteries which scientific explorers have yet left undiscovered. Equipped with thorough knowledge and able to present abstruse facts and close reasoning in the exact style which best pleases the earnest student, Mr. Carnegie's lectures are fascinating by reason of their fullness of knowledge. Besides, the story of the evolution of the theory of modern chemistry is one of the finest intellectual exercises in the whole range of science. The substitution of the balance for guesses, of Lavoisier's conceptions in place of the phlogiston fable, commences the history. Then comes Dalton's atomic theory, and closely following on this Gay Lussac and Humholdt's discovery of the combining volumes of gases, the deductions of Berzelius from these observations, leading ultimately to the law of Avogadro, which brought to the apprehension of chemists the fruitful conception of molecules. Avogadro's hypothesis, as Mr. Carnegie shows, was not fully appreciated until some forty years afterwards—he announced it in 1813—when it was brought into clear perspective by Gerhardt and Laurent. These workers showed the way to a truer perception of chemical equivalents, tracing by Avogadro's hypothesis in regard to gases the molecular as distinguished from the atomic composition of bodies. How the observations of isomerism led to the theory of valency, and how with this we get some rational idea of molecular architecture, and are led up to the stereometric conceptions of Wislizenus and to the most modern views of chemical equilibrium, are described in the latter chapters of the work. These, it must be confessed, are pretty hard reading, and can only be fully grasped by the advanced student in chemistry who is also familiar with algebraic forms of expression. But Mr. Carnegie takes his readers—we can hardly imagine he took many of his hearers—steadily through the maze, and will assuredly leave a few with the earnest desire to push the science a little further back into the ever-receding darkness.



## MILK FEVER OR PARTURIENT APOPLEXY.

NOW that summer is upon us and the calving season in full swing, with its consequent high death-rate and loss to cattle-owners, an amplification of and supplement to the advice contained in "Veterinary Counter Practice" may be found useful.

The best authorities are not at one as to the causes of milk fever, or even agreed as to the lesions found, each pathologist seeming to have a pet theory as to its origin. It attacks most frequently animals in a plethoric condition, and those spoken of as good, deep milkers, and most frequently after the third or fourth calf. Although the symptoms are generally pretty well known, care is necessary not to confound milk fever with certain other affections which sometimes simulate this disease in their outward manifestations. The condition known amongst cowmen as fardel-bound, or impaction of the third stomach with hard, dry, indigestible matter, is one of these disorders, but in this the symptoms are developed more gradually, and are accompanied with obstinate constipation and loss of appetite, which may or may not lead on to a lethargic or semi-comatose condition, and which is generally overcome in its earlier stages by a smart purge. A more likely condition with which parturient apoplexy may be confounded is that known as septic metritis, or inflammation of the womb—a condition induced by, in many cases, retention of the placenta, or afterbirth, and consequent decomposition of the membrane and absorption of septic matter. This condition has not unfrequently been mistaken for milk fever, with the result that the condition of the womb has been overlooked until too late. A careful observer should have little difficulty in differentiating between these two diseases, as while the distinguishing feature of milk fever is partial or total loss of voluntary motion and a comatose condition, the main symptoms of metritis are of a delirious character, with loss of balancing power, high fever, a filthy discharge from the vagina, and a persistent attempt to get rid of the offending material from the uterus by what to the attendant is generally known as straining. In such cases the condition generally shows improvement by attention to the exciting cause.

Many modes of treatment of milk fever have been suggested for this most fatal malady. Some veterinarians advocate the use of such agents as chloral, bromide of potassium, &c., while others affirm that the only useful and specific treatment is whisky in huge doses. All are inclined to the belief that to be serviceable the treatment must be prompt and bold. Generally a combined depletive and stimulant treatment is necessary; for it must be remembered that there is always an accumulation of effete material in the system to be got rid of, while the bowels are usually dormant. A safe and generally effective remedy is the following:—

Magnes. sulph.	..	..	..	..	3xlj.
Sodii hypo-sulph.	..	..	..	..	3ij.
Pulv. zingiberis	..	..	..	..	3i.
Aqua al	..	..	..	..	3xl.

Solve.

If paralysis be not complete and the power to swallow lost, this will pretty certainly be followed in the majority of cases by good results. If the power to swallow is gone, the medicine must be introduced into the rumen, or first stomach, by means of a trocar and canula in the way familiar to stockowners. In order to overcome if possible the general stasis of circulation and to ease the pressure believed to exist on the brain and spinal cord, as also to relieve the work of the over-burdened heart, excellent results often follow prompt bleeding, preferably from the jugular, an operation which most stockholders know how to carry out.

The next effort should be directed to keeping the flagging energies going, and this is best accomplished by the repeated exhibition of stimulants. Perhaps the best is

Ammon. carb.	..	..	..	..	3iss.
Aqua	..	..	..	..	3xxx.

Solve.

This may be given every three or four hours, or alternated with about  $\frac{1}{2}$  pint of whisky, until some eight or ten

doses have been given or relief is obtained. The draught may be coloured or not, as may seem best to the prescriber. Should the paralysis continue, this may also be administered through the canula, or through a hollow probang if necessary. Some authorities advise the use of turpentine, aloes, &c, but, considering the often fatal results, or the probability of slaughter, and consequent sending of the carcass to market, these remedies are inadvisable, as they tend to taint the flesh with their odour. While the treatment we have described is being persevered with an external stimulant may also be applied along the course of the spine, which treatment may take the form of a mustard application, turpentine on cloths wrung out of hot water, or, perhaps—what is best and easiest of application—the familiar white oils. An excellent formula for white oils is given in the "V. C. P.," or the following is a good substitute, and easily prepared:—

Ovi	..	..	..	..	..	ix.
Aqua	..	..	..	..	..	3xl.
M. Dilute addle—						
Spt. terebinth.	..	..	..	..	..	3xl.
Acid. acetic.	..	..	..	..	..	3vj.
M.						

Meanwhile, the general comfort of the animal must be seen to. Clean dry straw should be provided, and she should be propped on her breast-bone (sternum), so as to remove pressure from the lungs. The extremities must also be kept warm. The bowels should be kept going, if possible, and perhaps this is best accomplished by rectal injections of soap and warm water, which can be easily carried out by an ordinary Ingram's enema with a piece of flexible tubing attached, or by the injection of glycerine, in doses of from 3ss. to 3j., by means of an ordinary pewter syringe. It is also important that the bladder be relieved if necessary, an operation presenting no difficulty to the ordinary attendant, while, of course, attention will be directed to the emptying of the udder; and should the animal make any attempt to rise she should be helped to do so, and steadied for a time if successful. It is also wise to withhold all food for at least twenty-four hours, but to allow as much cold water as the animal will take.

Sometimes, as a result of the pressure and friction upon various parts of the body, bruises and sores may occur. These are best treated by green ointment and attention to cleanliness, while the return to health may be accelerated by the administration of some simple tonic powder.

This disease comes on usually so suddenly that the farmer is face to face with it in its worst form before he has had time to realise that there is anything wrong. All that can be said as to prevention is to see that the animal is carefully exercised up to the time of calving, sparingly fed, and, perhaps, one of the following powders may be given daily in a quart of water:—

Sodii hyposulph.	..	..	..	..	3ss.
Potass. nit.	..	..	..	..	3ss.
Pulv. zingiberis	..	..	..	..	3ij.
„ pectian.	..	..	..	..	3ij.
„ nucis vom.	..	..	..	..	3i.
„ fenugræe. vel anisi	..	..	..	..	3ij.

While we do not claim infallibility for the treatment we have described, we consider that it offers the most rational system that can be adopted, and it will yield better results than any other that has hitherto been pursued.

**MOIST IODOFORM.**—Vulpinus mentions in the *Phar. Centralhalle* that he has met with an iodoform which lost 13 per cent. of water in the exsiccator. Pure iodoform loses not more than 1 per cent. of its weight under the same circumstances. The loss of water in the former case was corroborated by a direct iodine determination.

**A NEW INVENTION** for drying the hair has been patented. It is an ingenious arrangement in the shape of a nickel or silver hot-water bottle on a small scale, with a non-conducting handle. It is about the size of a hair-brush, and when filled with hot water dries the hair with great ease and rapidity. There are four projections on one side of it, which receive the boiling water and carry their heat among the thickest hair.



## CHEMICAL SOCIETY.

THE first paper read before this Society on June 7 was by Mr. A. E. Tutton, on the crystallography of the normal

## SULPHATES OF POTASSIUM, RUBIDIUM, AND CAESIUM.

In a paper read last year the author had described very fully his measurements of certain crystals prepared from elements closely associated in the periodic system, but the present demonstration was not limited to goniometrical observations: it was practically a complete investigation of the three sulphates which head the paper. To ensure the utmost accuracy, Mr. Tutton has devised two new instruments of complicated construction, which were exhibited in photographs on the screen.

One of these enables the operator to obtain true geometrical sections of any crystals he may be examining with comparative ease; the other facilitates the observation of dispersion phenomena and the measurement of the refractive indices. The results generalised from 2,500 measurements confirm the absolute character of the periodic law in every respect: in crystalline form, in solubility, in density, in molecular volume, the position of  $\text{Rb}_2\text{SO}_4$  is intermediate between  $\text{K}_2\text{SO}_4$  and  $\text{Cs}_2\text{SO}_4$ .

The solubilities are:— $\text{K}_2\text{SO}_4$ , 10 grammes in 100 grammes water;  $\text{Rb}_2\text{SO}_4$ , 44 grammes in 100 grammes of water;  $\text{Cs}_2\text{SO}_4$ , 165 grammes in 100 grammes water.

In the "usual habits" of the crystals there is no material difference—they simply shade off into each other. Based upon the physical measurements was a pretty theory, tentatively put forward by Mr. Tutton, as to the molecular architecture of crystals. The "crystal elements" he regards as being built up of four chemical elements, arranged with regard to the symmetry of the rhombic system. Mr. Miers thought, however, we knew hardly enough about the size of the molecules and the spaces separating them to justify any such speculation at present. A series of photographs was shown, which illustrated the optical refractions exhibited by the crystals at different temperatures with varying spectra.

The next paper was by Mr. Herbert Jackson, B.Sc., King's College, on

## THE NATURE OF PHOSPHORESCENCE.

The subject was confined almost entirely to the phosphorescence which is associated with high vacua—a line of research inaugurated and popularised by Mr. William Crookes. The method of obtaining a good vacuum in a few minutes with but little labour contributed very materially to the success of this research. A double air-pump recently introduced gives with a few strokes a better vacuum than the old-fashioned Sprengel arrangement would furnish in an hour or two; and Mr. Jackson's experiments were, for the most part, carried out in a glass tube connected with the pump, and with a Ruhmkorff's coil, which would give a spark across 8 inches in air. In such a tube, when vacuum and sparked, the ordinary lustrous striæ obtained by coupling up a coil to a Geissler's tube are produced; but if different substances, such as lime or barium or strontium salts, be placed in the tube before exhausting and sparking, then the luminous phenomena are modified in accordance with the particular substance under experiment at the moment. Many perfectly pure compounds phosphoresce, but the phosphorescence is modified by impurity, though in what way is not at present known. Some substances require a much higher vacuum than others ere they exhibit the phenomenon. Temperature has a modifying action—a piece of lime glows with an orange tint; if heated below a red heat it is seen to be more yellow; whilst a cylinder which has been heated in the oxyhydrogen flame shows a bluish tint.

The argument is that these differences are due to variations in the length of the wave-oscillations, and just in the same way as certain substances are diathermanous for heat-rays so certain screens will arrest the particular vibrations which constitute in stimulated bodies phosphorescence.

Professor Dewar contributed a very interesting addendum to the paper. He said it was now recognised that there is

no fundamental difference between phosphorescence and fluorescence: it is very much a question of degree. Provided the temperature be lowered many substances which fluoresce at ordinary temperatures may be made to phosphoresce. Quinine sulphate, if stimulated at  $-180^\circ \text{C}$ . will remain phosphorescent ten to fifteen seconds. Most substances phosphoresce in oxygen; cotton wool in oxygen glows like a lamp. Phosphorescence may be regarded as a longer period of luminosity, fluorescence as the shorter; the transition is comparable to the change from the viscous to the elastic condition of a substance, or from the slow vibrations that would be set up by a lead bell to those set in motion by a metal of nobler *timbre*.

Professor Dewar then read a paper on

## THE VISCOSITY OF SALTS.

A cylinder of stoutest steel having walls 3 inches thick was bored sufficiently to give a small well,  $\frac{1}{2}$  inch diameter, into which a piston might be driven; an aperture from the base of the well was continued through the cylinder, but its diameter was only  $\frac{1}{16}$  inch—about that of a stout knitting-needle. The "viscosity," or otherwise, of the substances examined was determined by placing a small quantity of the material in fine powder beneath the piston and putting on to the piston great pressure: if the substance was viscous, the effect of the pressure would be to squeeze through the fine aperture what was practically a rigid and fairly elastic wire. In several cases forcible ejection of the contents occurred with explosive violence and no wire would form. As the pressure employed sometimes reached 60 to 80 tons on the square inch, whilst the pressure of the largest Armstrong gun when fired does not exceed 16 to 18 tons per square inch, it may be imagined that these experiments are not without danger, and the professor said small as were the apertures and thick as were the walls, he had yet managed to burst three of his cylinders.

A long list of salts was given, and it was seen to be practically impossible to foretell as to which would be viscous and which non-viscous.  $\text{KI}$ ,  $\text{KBr}$ ,  $\text{KCl}$ ,  $\text{NH}_4\text{NO}_3$ ,  $\text{NH}_4\text{Cl}$ ,  $\text{NH}_4\text{CNS}$ ,  $\text{Na}_2\text{SO}_4$  crystals,  $\text{FeSO}_4$ ,  $\text{KCy}$ ,  $\text{AgNO}_3$ ,  $\text{KHO}$ ,  $\text{NaHO}$ ,  $\text{NaC}_2\text{H}_3\text{O}_2$  exsic., alums, borax, and many others are viscous and give these wires.

$(\text{NH}_4)_2\text{SO}_4$ ,  $\text{Na}_2\text{CO}_3$  exsic.,  $\text{NaC}_2\text{H}_3\text{O}_2$  crystal, alum exsic.,  $\text{NaCl}$ ,  $\text{HgCl}_2$ ,  $\text{MnSO}_4$  are amongst the non-viscous salts. As a general rule organic substances are readily formed into wires—*e.g.*, sugars, starch, benzoic acid, and many others. Pure iodine also could be squeezed out into pliable wires yards long, but naphthalene resisted all pressure and obstinately exploded. Specimens of several of these wires were produced from the professor's pockets, and were handed round for examination.

The President said there was evidently an opening which their pharmaceutical friends might or might not view with alarm—*viz.*, the administration of physic by the inch.

The announcement that possibly Professor Dewar will give the Fellows an account of some of his recent researches upon a special evening was very well received. It was a ballot-night again, all the candidates being elected. Dr. Walker's paper on "The Boiling-points of Homologous Compounds" was taken as read.

## SOCIETY OF CHEMICAL INDUSTRY.

THE last meeting of the London Section was held on Monday, June 4, the attendance being but moderate.

Mr. McMillan, a Government official, described some "Experiments on the Strength of Leather," which the sequel proved to be entirely mechanical. In leading up to the experimental part of the paper, Mr. McMillan intimated that at the Government Factory, Cawnpore, the hides are tanned mainly with babul bark (*Acacia arabica*), though myrabolans and valonia are also used, the latter being of very recent introduction.

The general result of the experiments indicates that leather prepared in India is somewhat better than the article supplied to the Government by a firm of reputable English tanners.

In commenting upon the paper, Dr. Alder Wright once more proved the truth of the saying that "there is nothing



like leather." He had found so much "dressing" in some samples that he was prepared to admit as true the stories as to life being sustained for several weeks by the simple, if monotonous, operation of chewing leathern laces or straps; whilst he quite believed a skilful French *chef* would be able to provide a variety of appetising dishes, from soup onwards, from the same source, for he had found anything up to 33 per cent. of "additive compounds," and he had actually produced alcohol from leather by fermenting the glucose that was added with fraudulent intention.

The second paper was by the same author. It was a "Note on the Colour of Brass," and consisted of a suggestion to employ arbitrary mixtures of copper and zinc in varying proportions as standards for estimating by means of the eye brass alloys of unknown composition. The standards consisted of sealed glass tubes containing borings of brass derived from experimental ingots.

The method was recognised as likely to afford a useful hint to metallurgists, for a small sample of mixed metals might be taken from the furnace, cooled, and compared with the standard, and any addition of either copper or zinc could be made to the mass whilst still in the furnace.

The last paper was on "The Distillation of Peat," by a Russian chemist, Dr. P. Dvorkovitch.

Probably out of compliment to his compatriot Professor Mendeléeff was present at this meeting. It was a pity Dr. Dvorkovitch did not read his paper by deputy, for it was with the greatest difficulty that the constantly lessening band of hearers could make head or tail of "English as she is spoke" by a Russian.

After a copious introduction, and a lantern-exhibit of Irish peat-bogs and the harvesting of the peat, the title of the paper was justified by a brief allusion to the distillation of peat, which it was contended might be economically carried out, and at the same time would afford a means of ameliorating the sad condition of the Irish peasant.

Mr. Boverton Redwood and Mr. Watson Smith were both afraid, in view of past experience, that there was not much prospect of settling one phase of the Irish question by peat-distillation. The latter quoted a valuable paper by Dr. Angus Smith, in which, amongst other useful suggestions, the novel proposition was made that it might be possible to grow peat-reservoirs on hillsides, as its water-absorbing capacity is very high. In winding up the session, Mr. Wm. Thorp thanked the members for the support which they had accorded to him during his tenure of the office of chairman, and having announced that the annual meeting of the Society will be held at Edinburgh in the middle of July, the proceedings for the 1893-94 session came to an end.

#### THE BABY'S EXHIBITION.

THE title given to this exhibition is in some respects an anomaly, as, to the probable surprise of the visitor (though somewhat, it may be, to his relief), no babies were to be found on the premises at Humphreys' Hall, Knightsbridge, W., where the attraction was located. The exhibits were mainly composed of the food, medicines, clothing, nursery-furniture, sanitary preparations, and other articles so useful for nursing mothers, and in the feeding and bringing-up of young children.

In the Foods section was shown Faliere's Phosphatine, which is already well known in France as a high-class food for infants and invalids. It is composed of a proportion of purest cocoa, with such farines as arrowroot and tapioca, and when prepared with milk makes a pleasant food for young children from the age of seven months. One tablespoonful suffices for a meal for a child, and this may be increased up to two for an adult. M. Faliere is introducing his preparation into England from his agency at 64 Holborn Viaduct, E.C. Close at hand, Mr. H. B. Chibnall, of Hammersmith, the maker of the "Dorina" nursery-biscuits, had arranged the blue, gold, and yellow boxes in which his goods are packed very artistically, and we understand had attracted business from more than one titled visitor to the exhibition. The Framo Food Company showed a large and well-placed stand of their specialities, including Framo Food Jelly (which may be used as a jam) and their lozenge-

preparation. Messrs. Brown & Polson had on view in good position a large assortment of the various sizes of their cornflour; and the "Cerebos" Salt Company were exhibiting their new table-salt, which, they claim, contains the nutritive ingredients of bran, almost entirely wanting in white bread. The Sanitas Company (Limited) occupied a large space, and were showing a selection of "Berkefeld" filters, one variety being specially adapted for kitchen and other taps, and capable of filtering 20 gallons of water an hour when so fixed. The company also exhibited their well-known sanitary preparations. Aspinall's enamel and "Wapicti" (a new washable distemper paint) also figured on this stall. Aspinall's enamel proved its right to be in the show by the exhibition of a cradle which had been enamelled by it. Messrs. J. Defries & Son, of Houndsditch, at one of the largest stands in the hall were showing the Pastenr germ-filter, concerning which they urge the fact that it is the only filter protecting the water-drinker from germs. The patent Soxhlet milk-sterilising apparatus for home use was shown by Mr. A. Goldschmidt, of 49 Barbican, E.C.; and the Quilaline Company, of 124 Bishop's Road, Fulham, were demonstrating the qualities of "Quilaline" for removing grease, paint, dirt, and other stains from clothes and gloves. The French Hygienic Company, of 6 Conduit Street, W., in addition to their coca preparations, had on show the Ean de Lis vaporiser, "Fluide Kalodermale" (a preparation for softening the skin and preventing redness and freckles), and a soap, powder, toilet-waters, and orange-flower cordial for infants; and Price's Patent Candle Company exhibited a large encased stand of their manufactures, among which we noticed night-lights, toilet-soaps, nursery glycerine cream, and food-warmers.

#### TRADE-MARKS APPLIED FOR.

ANY person who has good grounds of objection to the registration of any of the following marks should at once communicate with Sir Reader Lack, Comptroller-General, at the Patent Office, 25 Southampton Buildings, Chancery Lane, London, W.C.

(From the "Trade Marks Journal," June 6, 1894.)

"EQUILINE," and signature of applicants; for embrocation for human use. By A. Thomas & Co., 1 Hawley Road, Kentish Town, N.W. 174,324.

"HEADACHE AND NEURALGIA CACHETS," signature of applicant, and wording; for a medicine for human use. By Wm. Burgess, 64 Whitechapel, Liverpool. The essential particular is the signature. 178,835.

"OPAL"; for a brown ointment for human use. By Mabel Breton, 16 Cathedral Street, Glasgow. 179,033.

"FORRESTER'S MOTHER'S HELP," device of child holding ointment-box in each hand, and wording; for a nit-ointment. By A. Forrester, 39 and 41 Cross, Dysart. The essential particular is the device. 179,158.

(From the "Trade Marks Journal," June 13, 1894.)

"MOONLIGHT"; for veterinary ointment. By S. Smith, 1 Farnival's Inn, London. 179,729.

Device of minister baptising child at font, and wording on label; for maternity syrup for wasting diseases, mental depression, debility, &c. By A. E. Beardmore, 365 New Hampton Road, Wolverhampton. The essential particular is the device. 179,733.

Device of combined coats-of-arms of Brighton, Eastbourne, and Hastings, and wording; for mineral and aerated waters. By R. Fry & Co., 21 and 22 Middle Street, Brighton. The essential particular is the device named. 179,496.

Various designs of cupids and flowers, of female figure in oriental dress, with mosque in background, and of female in Grecian dress watching child asleep; for perfumed toilet-soap. By Blondeau et Cie., Ryland Road, London, N.



## Medical Cleanings.

### SALT FOR SWEATING.

DR. NELSON states that night-sweating is prevented by wearing a shirt dipped in salt-brine and dried. The *Medical Reporter* says that salted stockings are splendid for sweaty and tender feet.

### BOVININE FOR OLD ULCERS.

MR. C. D. SLATER, M.R.C.S., of Bristol, recommends the use of bovine for curing old ulcers. After washing the parts with boric-acid solution, he applies the preparation on "Christiated lint." The results obtained from the treatment are most satisfactory. This is rather a remarkable use for a food.

### TREATMENT OF LEAD-POISONING.

DR. PÉROU states that the administration of 2 grs. of sulphite of sodium thrice daily gives rapid relief in lead colic. He says that the elimination of the metal is much hastened by this treatment, and that the sulphite is an efficient prophylactic agent. The employment of the drug is devoid of danger.

### VASELONE.

VASELONE is a substance introduced as a substitute for vaseline. According to an analysis by Villon, it is a solution of stearone and margarone in neutral mineral oil. Stearone is prepared by distilling stearin with lime. Margarone is prepared in a similar way from beef suet. Vaseline consists of 15 parts of margarone and 5 of stearone in 100 of thoroughly purified and odourless mineral oil. The fatty product obtained, after cooling, resembles vaseline, but is not as transparent. It is white, odourless, neutral, and not affected by acids and chemical reagents.

### PILLS FOR CHRONIC BRONCHITIS.

Ammonii chloridi	..	..	..	gr. xv.
Ammon. carb.	..	..	..	gr. xv.
Pulv. ipecac.	..	..	..	gr. iij.
Morph. hydrochloratis	..	..	..	gr. j.
Glycer. tragacanth.	..	..	..	q.s.
Pulv. glycyrrhiz.	..	..	..	q.s.

Mass, and divide into ten pills. One to be taken night and morning.

—*Medical Press.*

### BISMUTH-POISONING.

THE *New York Medical Journal* records a case of bismuth-poisoning, the symptoms being not unlike those of lead poisoning—viz., black lines along the gums, headache, nausea, vomiting, paleness of the countenance, elevated temperature, rapid pulse, and marked diarrhoea, which continued until the patient's death, which occurred eight days after the first symptoms appeared. The patient was a girl, aged 15, who had a severe burn on the back, and to this bismuth subnitrate was applied. The subnitrate was free from lead and arsenic.

### ARGENTAMINE FOR GONORRHOEA.

THE new number of the *Therapist* (published at 6 and 7 Cross Lane, St. Mary-at-Hill) contains an important article on "The Treatment of Gonorrhoea with Silver Salts," by Dr. Schaeffer. The author says, "Success is always attained when dilute silver-nitrate solutions are employed early in the treatment of gonorrhoea, as ten years' experience in the dermatological clinic has convinced me." Dr. Schaeffer gives reasons for objecting to the ordinary silver nitrate, and describes a new ethylenediamine silver-phosphate solution known as argentamine, which has been found in his experience much superior.

### CARBOLIC ACID IN SNAKE-BITE.

A CORRESPONDENT of the *Scientific American* gives particulars of the cure of an Indian chief who had been bitten on the foot by a *tomagas*, the most venomous snake in Nicaragua. The man was in the most pitiable condition. Thin watery blood was issuing from his mouth, nose, ears, and even from

the tattoo marks on his arms and breast. His urine was also discoloured by blood. The wound was cauterised with carbolic acid, two 3-drop doses of which were also given internally at an interval of half an hour that evening. Two hours after the second dose he got an emetic and he soon went to sleep. The next morning he got another dose of the acid, and he fully recovered.

### NOCTURNAL INCONTINENCE OF URINE.

A MEMBER of the British Medical Association has found the following mixture of use for himself:—

Tr. nucis vom.	..	..	..	3j.
Tr. hyoseyam.	..	..	..	3ij.
Aq. menth. pip. ad	..	..	..	3vliij.
3ss. ter die.				

Every morning before dressing he took a cold bath, and allowed the spray to run on to the lower part of the spine and pnbcs. This, with about a month's trial, entirely cured him after fourteen years in which he never a night passed without urinating the bed.

### SPASMOTIN OR SPHACELOTOXIN.

THIS new remedy is a poisonons principle of ergot. It causes spasms of the small arteries, and has been used for its stimulating effect on the uterus. Dr. Jacoby, of the Strassburg University has obtained spasmotin in the chemically pure form, by treating oil-free ergot with ether. It occurs as a yellow powder of amorphous appearance; insoluble in water, dilute acids, and petroleum ether, but very soluble in ether, alcohol, acetic ether, benzol, &c. It forms salts with alkalies. Its constitution is represented by the formula  $C_{20}H_{21}O_9$ . The pharmacological effects of ergot are inherent in spasmotin and its soda salts. Spasmotin is suitable also for subcutaneous use. The doses employed so far have ranged only from  $\frac{1}{2}$  to 1 grain, but as much as 15 grains per day have been given with safety.

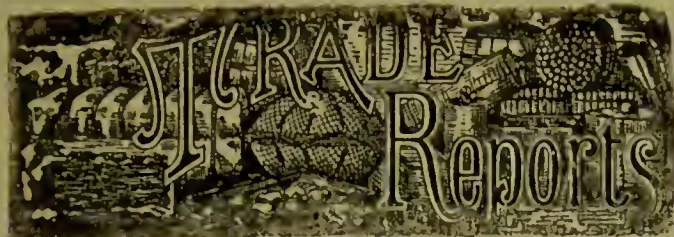
### THE VIRULENCE OF MICROBES.

THIS is a subject which still fascinates bacteriologists, especially the causes which determine increase or decrease of virulence. Dr. V. Galtier has made a long study of it, and has recently come to the conclusion that microbes, attenuated till they cannot alone produce a mortal malady, become again virulent when two species are introduced into the organism. The two species may multiply side by side, but generally one tends to disappear, and the other becomes again pathogenous. When two species of microbes are found associated, it is sometimes one and sometimes the other which regains its virulence according to the conditions. Association of bacteria can be employed in the laboratory to render attenuated microbes again virulent. Not only can the return of certain epidemics be explained in this way, but the effects of vaccination with mild virus may be aggravated by this means. The passage of one microbe, conferring immunity against a given malady, may predispose to the attack of another.

### THE BEST BISMUTH TO GIVE.

MEDICAL men, writes an American authority, have got into the habit of prescribing bismuth in the form of the subnitrate instead of the subcarbonate, and the favourable results following the employment of the latter are not appreciable when the former is given. The reason for this is obvious, since the subcarbonate is an amorphous powder, while the subnitrate is a crystalline substance, and no matter what may be the amount of the dose it always enacts the rôle of an irritant. But even with the administration of the subcarbonate—and the rule is equally applicable in the case of subgallate—one or other of the digestive ferments should be added. In all cases the addition of either pepsin or pancreatin, or the simultaneous exhibition of malt extract, will materially enhance the bismuth effects. This authority forgets, we think, that the subcarbonate dissolves in the stomach, which alone may account for its superior action. About twenty years ago we used to hear a good practitioner say that he got more good out of 5 grains of subcarbonate of bismuth than from a heaped-up teaspoonful of the subnitrate, which was then a common dose.





*Notice to Retail Buyers:—It should be remembered that the quotations in this section are invariably the lowest net cash prices actually paid for large quantities in bulk. In many cases allowances have to be added before ordinary prices can be ascertained. Frequently goods must be picked and sorted to suit the demands of the retail trade, causing much labour and the accumulation of rejections, not all of which are suitable even for manufacturing purposes.*

*It should also be recollected that for many articles the range of quality is very wide.*

42 CANNON STREET, E.C., June 14.

#### Smyrna Opium Telegram.

Our Smyrna correspondent, wiring on Wednesday night, informs us that speculators have again appeared in the market, and are buying freely at rising prices. For current quality manufacturing opium the equivalent of 8s. 8d. per lb. f.o.b. has been paid. This marks a rise of 3d. per lb. upon the last selling figure.

#### Amsterdam Cinchona Telegram.

Our Amsterdam correspondent wires this (Thursday) afternoon:—At our cinchona auctions to-day 4,282 packages of Java bark sold at an average unit of 4.12c. per half-kilo, as compared with 4.30c. at the previous sale, a reduction of about 5 per cent. The following was the range of prices:—Manufacturing barks in quills and chips, from 6 $\frac{3}{4}$ c. to 40c. (5 $\frac{1}{4}$ d. to 7d.; ditto root from 9 $\frac{3}{4}$ c. to 29 $\frac{1}{4}$ c. (1 $\frac{7}{8}$ d. to 5 $\frac{1}{2}$ d.); druggists' barks in quills and chips, partly of exceptionally fine quality from 8 $\frac{3}{4}$ c. to 15c. (1 $\frac{3}{4}$ d. to 2s. 3d.); ditto root from 29 $\frac{1}{4}$ c. to 29 $\frac{3}{4}$ c. (5 $\frac{1}{2}$ d. to 5 $\frac{3}{4}$ d.). The chief buyers in order of their purchases of quinine were the Brunswick and Auerbach Works, Mr. Gustav Briegleb, of Amsterdam, the Amsterdam Factory, and the Frankfort Quinine Works.

#### The Liverpool Market.

Our Liverpool correspondent, writing on June 12, says that the market has been cleared of fine *Sierra Leone chillies*, and now only the lower grades are to be had at 30s. per cwt. *African ginger* has steadied itself, and 35s. 6d. to 36s. per cwt. is still value. In *Acacia gum*, *Soudan sorts* continue to meet with only a moderate sale, but at prices that are fairly steady, ordinary mixed selling at 40s. per cwt., with better qualities in proportion. *Castor oil* continues steady at 2 $\frac{3}{16}$ d. for good seconds Calcutta, and the market shows signs of moving upwards. *Fenugreek-seed*, fine Egyptian, has been selling at 6s. 9d. per cwt. *Honey* of all grades continues very firm at late rates. *Chilian anise* is firmly held, 20s. to 28s. per cwt. for the best grade being asked for the parcel just landed ex *Sorata*. *Beeswax* continues to meet with a ready sale. The 28 bags Chilian just landed are held for 7l. 17s. 6d. to 8l. 10s., according to quality.

#### The American Market.

Our New York correspondent, writing on June 5, observes: The drug market is still governed by the same unfavourable conditions which have existed for some time. The month opens with some little increase in the number of jobbing orders, though the distribution is still disappointingly small. Beyond a few important declines in a few chemicals, the general market shows very little change. *Aloes (Curaçao)*: There is no stock in first hands, and very little reported coming forward. The market for the present is controlled by the jobbers, who demand 2 $\frac{3}{4}$ c. for quantities. *Ammonia Muriate (white grain)*: Reports from primary markets continue strong, and 6 $\frac{1}{2}$ c. is now quoted for English. German held at 7c. *Balsam Copaiba* is somewhat improved

in position, owing to light arrivals. Values remain unchanged at 31c. for Central American, 35c. for Pará, and 39c. to 49c. for Angostura. *Balsam Fir (Canada)*: Holders show some anxiety to realise on stock, and values are entirely nominal. Buyers are holding off in anticipation of lower prices: \$2.75 is now quoted, and less would doubtless be accepted. *Cascarilla* is quite scarce, prime quality being almost out of market. Some inferior goods are to be had at 6 $\frac{1}{2}$ c. *Chloral Hydrate*: The Secretary of the Treasury has decided that this drug is dutiable at 25 per cent. *ad valorem*, instead of a specific duty of 50c. per lb. This will reduce the cost to importers, who have marked the price down 35c. per lb.; it being now quoted on the bulk-price basis of 77 $\frac{1}{2}$ c. for crystals, and 72 $\frac{1}{2}$ c. for crusts in 1,000-lb. lots. *Galls (China)* have declined to 10c. to 10 $\frac{1}{2}$ c. Blue Aleppo *Galls* easier at 13c. to 13 $\frac{1}{2}$ c. *Oil, Cod-liver (Norwegian)*: Advices from Hamburg indicate a somewhat lower market, \$17.50, c.i.f., being named for shipment from that point. At primary sources, however, the market is reported firm. *Oil of Peppermint*: Alarming reports of damage to the peppermint plant are coming to hand, late advices reporting floods in the lowlands of Wayne County, N.Y., and the fields overrun with weeds, greatly to the detriment of the growing crop of mint. Prices remain as previously quoted. *Opium* appears to have few friends in its present depressed condition. Prices are more or less nominal, and, although \$2 is quoted, it is not improbable that less would be accepted. Buyers are very indifferent to any but actual requirements. The liberal supplies coming to hand do not tend to improve the situation; within the last week 200 cases arrived at this port. *Salicine* is slightly lower at \$1.50 to \$1.60. *Salol* has been reduced 75c. per lb. to \$3.5 in bulk in 100-lb. lots. *Soda Nitrate* is easing off. Spot stock may now be had at \$220 ex vessel, and \$225 ex store. Prices for summer and later shipments are nominally quoted at \$197 $\frac{1}{2}$  to \$2. *Simaruba-bark* is rather scarce, and for the limited quantity held here 28c. to 29c. is asked. *Sarsaparilla (Mexican)*: The invoice of 80 bales, which arrived per *Vigilancia*, was sold, previous to arrival, at a fraction less than 9c. A small lot may be had from first hands at 8 $\frac{1}{4}$ c. The present prices, it is thought, may bring forward stock held back on account of the low figures ruling here. *Tamarinds* are getting scarce; on spot \$140 per keg being required in most instances. *Turpentine* is nominally steady at 30c. to 30 $\frac{1}{2}$ c. in barrels. *Codeine* has again been reduced 10c. to \$3.80 in bulk. *Honey (California)* is tending higher, influenced by adverse reports from primary markets; now quoted 6 $\frac{3}{8}$ c. to 6 $\frac{1}{2}$ c. in cans. *Vanilla Beans* are coming to hand very slowly, and prices show an advancing tendency. Mexicans are firmly held at \$6 to \$12, and cuts at \$5 to \$5.75.

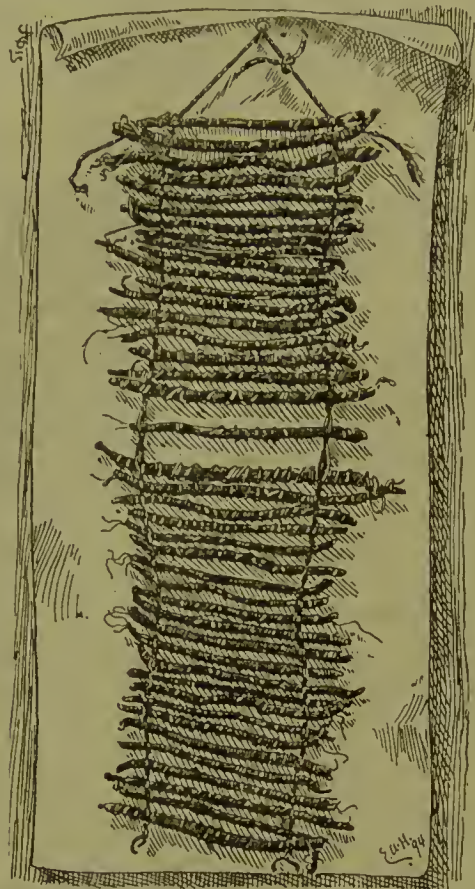
#### The Zanzibar Clove crop.

Although the receipts of duty in kind on cloves at Zanzibar fell off by 9,848 frasilas (of 35 lbs.) in 1893 as compared with 1892, the season's crop was above the average, and if it had not been for heavy rains, which did considerable damage to many plantations, and the want of labour, most satisfactory results would have been obtained. The clove-season is reckoned from September to March. The practice of adulterating the cloves with clove-stems, that part of the tree joining the bud to the branch, has been recently becoming more and more general in the islands, especially at Chaki Chaki, the capital of the island of Pemba, and it has a most injurious effect on the value of the spice. It is hoped that the proclamation issued by the Sultan against the adulteration of cloves will be effective, for Zanzibar is practically dependent for its revenues on the clove-crop. It is also absolutely necessary that a botanical station for experimental cultivation should be founded in Zanzibar under the direction of a competent specialist on tropical agriculture, where other remunerative forms of cultivation may be experimented with and recommended, and where Arab landowners shall be taught that it is useful to have more than one iron in the fire. With a fertile soil, a tropical climate, and a rainfall of from 60 to 100 inches a year, it would be surprising if this could not be effected at a comparatively small outlay and with lasting benefit to the country. In spite of the decreased receipts of cloves tendered in kind in payment of duty, the sale of cloves for account of the Zanzibar exchequer brought in 465,156r. in 1893, against 457,732r. in 1892.



## Brazilian Vanilla.

It is well known that the vanilla-vine occurs in a wild state over the greater part of tropical South America, but its fruit is seldom collected and cured; at any rate, not for export to Europe, where it could not possibly compete with the systematically cultivated produce of Mauritius and the Seychelles. The subjoined illustration represents a bundle of vanilla taken



from a consignment which was received in Liverpool the other day from the Amazon. The pods, which were of a rather pale brown colour, and strong, though somewhat rank flavour, presented a very irregular appearance, their length varying from about 3 to 10 inches. They were strung on two fibre strings, ladder-wise, evidently to make them easier to carry. As a pharmaceutical curiosity the vanilla was interesting, but it had no commercial value.

**ACID (CARBOLIC).**—Rather firmer, the present quotation being 6d. to 6½d. per lb. for 39°–40°; and 5½d. to 5¾d. per lb. for 34°–35° crystals. For *Cresylic acid* (95 per cent.) from 1s. 1d. to 1s. 3d. per gallon is asked; for crude: 60 per cent., 1s. 7½d. to 1s. 8d.; and 75 per cent., 1s. 10½d. per gallon.

**ACID (CITRIC)** remains exceedingly quiet at 1s. 3d. per lb. *Concentrated juice* offers at 13l. 15s.

**ACID (OXALIC).**—The price in London is 3½d. per lb., in Swansea 3¾d. per lb.

**ACID (TARTARIC).**—Slow of sale and without improvement. English may be had, according to brand, at from 10¾d. to 11d. per lb., foreign, in crystals or powder, at 10¾d. to 10½d. per lb.

**ALOES.**—Our imports this week include 171 packages *Curaçao* aloes from Hamburg and Amsterdam, 22 cases *Cape* aloes from Mossel Bay, and 1 hogshead of aloes from *Barbadoes*. If this last is a parcel of genuine *Barbadoes* aloes it is the first that has been imported for a very long time, and ought to be well competed for. The exports of *Cape* aloes from *Cape Colony* were:—In 1893, 451,327 lbs., value 9,622l.; in 1892, 372,165 lbs., value 1,825l.

**ANISE.**—The supply is now very small, and the new crop still a long way off. *Russian* anise, ordinary stony unsifted to good bright sifted is held at 28s. to 30s., and *Italian* at from 31s. to 33s. per cwt.

**ANTIMONY** is again lower, being quoted at from 32l. to 32l. 10s. per ton.

**ARSENIC.**—Very firm and tending higher; best white powder in barrels is quoted at from 14l. 15s. to 15l. per ton, packed in kegs the price is 20s. per ton extra.

**ASAFOETIDA.**—"There used to be," writes the British Consul at Isfahan, "an export of some 500,000 lbs. of this gum yearly from the Persian province of Yezd. Of this about 150,000 lbs. came from Yezd proper, and the rest from Tabbas. Owing to the way in which the gum was adulterated, however, the price fell greatly, and the trade has almost died out. Neither in 1893 nor in 1892 has one-tenth of the usual amount been exported."

**BALSAM (PERU).**—Steady but not much business doing; the price is 7s. 6d. per lb.

**BISMUTH.**—In our Melbourne journal (*The Chemist and Druggist of Australasia*) for May 1, which is just to hand, a Tasmanian correspondent states that some excitement has been caused among the mineral interests of the island by the statement that the Shepherd and Murphy Tin-mining Company, of Belmont, have received the returns of the first ton of Tasmanian bismuth-ore sent from their works to Sydney as a trial shipment. The return shows the ore to have contained 53 per cent. of bismuth metal, and to have realised 235l.—figures which far exceed the most sanguine expectations. We hear on good authority that the "outside" parcels which have caused the reduction in the convention price are of Bohemian origin, and were brought to the market by a German firm. It may be remembered that Bohemian bismuth made its appearance, more or less sporadically, about twelve years ago. The position in London has undergone no change.

**CAMPHOR (CRUDE).**—On May 10 the market at the Chinese Treaty ports was described as exceedingly weak. *Japan* gum was quoted nominally at \$37½ per picul; and *Formosa*, of which there was a stock of about 1,500 boxes, at \$34, being lower. There has been a somewhat better demand lately, and prices show a slightly firmer tendency for the *Chinese* article, which is now quoted at 70s. to 73s. e.i.f. terms, July-August shipment. Of *Japanese* camphor 400 piculs July-August shipment are reported to have been sold lately at 82s. 6d. per cwt. c.i.f. terms, but to-day the quotation is higher—viz., 85s. to 87s. 6d. per cwt.

**CANARY-SEED.**—Rather quieter and with a downward tendency. *Turkish* seed runs in price from 38s. to 42s., and *Moroccan*, according to quality, at from 44s. up to 55s.

**CARAWAY.**—A good many sales have been effected lately, ordinary quality at as low a figure as 25s. 6d. per cwt. Good to fine caraway, however, is still held at from 29s. to 31s. per cwt.

**CARDAMOMS.**—The exports of cardamoms from Ceylon from January 1 to May 14 have been:—In 1894, 137,880 lbs.; in 1893, 159,281 lbs.; in 1892, 172,659 lbs.; in 1891 139,896 lbs. According to the Austrian consul at Colombo, the cardamom-crop of 1893 was the largest on record in the island. In that year 428,210 lbs. were exported against 372,510 lbs. in 1893. The large yield is due only to favourable climatic conditions, for the area under cultivation has not increased appreciably, the crop not being sufficiently promising for European planters.

**CASSIA FISTULA.**—The present stock in Holland of *Java* cassia fistula is about 20 tons, which is comparatively little. The Dutch market is dull, owners asking the equivalent of 23s. 6d., while there are no buyers over 18s. 6d. per cwt. A parcel of 15½ tons old dried-up pods has just been sold at a secret price.

**CHLORATE OF POTASH** may still be had from second-hand holders at 6¾d. per lb. f.o.b. Liverpool.

**CINCHONA.**—Tuesday's bark-auctions were of moderate extent, the six catalogues comprising the whole of the bark offered. The circumstance that the entire contribution of Ceylon to the cinchona-auctions consisted of 7 packages, or about one-third of 1 per cent. of the total offered, is an indication of the position of insignificance to which



island has been reduced as a factor in the cinchona-market. The bark at auction represented an equivalent of about 12 000 lbs. of sulphate of quinine. The total quantity of bark included in the auctions was as follows:—

	Packages		Packages
Ceylon cinchona .. ..	7 of which	7 were sold	
East Indian cinchona .. ..	1,978	"	1,928
Javan cinchona .. ..	69	"	46
Cuprea bark .. ..	327	"	173
	2,381	"	2,154

The tone throughout the auctions was firm, and good barks were well competed for, the unit being from  $\frac{3}{4}$ d. to 1d. per lb. The following prices were paid for sound bark:—

CEYLON CINCHONA.—Fair original *Hybrid* shavings, 3d.; small bright renewed *Succirubra* shavings,  $3\frac{1}{2}$ d. per lb.

EAST INDIAN CINCHONA.—The East Indian bark included a considerable quantity of *Officinalis* quill bark from Southern India (Nilgiri Hills). There was also a fair proportion of grey and yellow chips among the Indian cinchona. The quotations were:—*Original*: Red varieties—Dull to good bright stem and branch chips, 1d. to  $2\frac{1}{4}$ d.; broken and whole quill,  $1\frac{1}{4}$ d. to  $2\frac{1}{2}$ d.; shavings,  $1\frac{3}{4}$ d.; root,  $1\frac{3}{4}$ d. to  $1\frac{1}{2}$ d. per lb. Grey varieties—Fine bright mossed quill, 11d.; good mossed, partly brown and thin quill,  $1\frac{1}{2}$ d. to  $4\frac{1}{2}$ d.; good broken quill, 5d.; chips,  $2\frac{1}{2}$ d. to 4d. per lb. Yellow varieties—Ordinary dull and dusty to good bright stem and branch chips,  $1\frac{1}{2}$ d. to 4d.; shavings, common to fine bright, 1d. to  $4\frac{1}{2}$ d.; root,  $3\frac{5}{8}$ d. per lb. Hybrid root,  $2\frac{3}{4}$ d.; ordinary chips,  $1\frac{3}{4}$ d. to  $1\frac{1}{2}$ d.; shavings, dull to good,  $1\frac{5}{8}$ d. to  $3\frac{3}{4}$ d. per lb. *Renewed*: Red varieties—Ordinary to good bright stem and branch chips,  $1\frac{1}{2}$ d. to  $3\frac{1}{2}$ d. Grey varieties—Ordinary to good bright quilly chips, 2d. to 5d. per lb. Yellow varieties—Ordinary to good chips,  $1\frac{1}{2}$ d. to  $3\frac{1}{2}$ d.; shavings,  $1\frac{3}{4}$ d. per lb. Hybrid shavings,  $1\frac{1}{2}$ d. to  $1\frac{3}{4}$ d. per lb.

JAVAN CINCHONA.—*Ledger* chips,  $3\frac{1}{4}$ d.; dull dusty root,  $3\frac{3}{4}$ d.; good rich root,  $5\frac{1}{4}$ d. per lb.

CUPREA BARK.—Of 327 bales cuprea, imported in 1882-84, 173 sold at prices ranging from  $1\frac{1}{2}$ d. to  $1\frac{3}{4}$ d. per lb.

The exports of cinchona from Ceylon from January 1 to May 14 have been:—1894, 827,879 lbs.; 1893, 1,910,172 lbs.; 1892, 2,357,208 lbs.; 1891, 2,051,542 lbs.

CLOVES.—In consequence of the rumour, which obtained currency a few days ago, that locusts were devastating the African mainland opposite Zanzibar, and were expected also to attack the islands of Zanzibar and Pemba, the clove-market assumed a much firmer appearance. Sales were made early this week at  $2\frac{1}{2}$ d. per lb. on the spot, and  $2\frac{7}{16}$ d. per lb. for July-September delivery and August-October delivery. This improvement, however, was only temporary, and on Tuesday the entire advance was practically lost again. Some 3,000 bales are supposed to have changed hands during the little boom, but considering that the London stock alone is equal to about 18 months' consumption, there does not seem much hope of a genuine improvement. At auction 827 bales Zanzibar cloves were nearly all bought in, a few lots only selling at  $2\frac{1}{2}$ d. to  $2\frac{1}{2}$ d. per lb. for barely fair to fine. To-day (Thursday) the reports of bad crop-prospects have been revived, and the market closes excited and dearer. July-September delivery has been run up to  $2\frac{7}{16}$ d., August-October to  $2\frac{9}{16}$ d. per lb. About 1,000 bales have been sold.

COAL-DISTILLATION PRODUCTS.—*Sulphate of ammonia* has fallen to 14l. to 14l. 2s. 6d. (according to brand) in London; 14l. in Hull; and 14l. 1s. 3d. per ton in Leith. *Cresote* quoted at  $1\frac{1}{2}$ d., liquid at  $2\frac{3}{4}$ d. per gall., salts at 20s. to 22s. 6d. per ton. *Benzole* easier: fifties, 1s.  $3\frac{1}{2}$ d.; nineties, 1s. to 1s. 1d. per gallon. *Naphtha*, crude 30-per-cent., casier at 7d.; solvent naphtha: 95-per-cent., 1s.  $5\frac{1}{2}$ d.; 90-per-cent., 1s.  $4\frac{1}{2}$ d. per gallon. *Pitch* has advanced nearly 15 per cent. lately, and is now quoted at 31s. to 32s. f.o.b. *Toluol* slightly easier at 1s. 6d. per gallon. *Gas-tar*, 11s. to 11s. 6d. f.o.b. per barrel of 40 gall.

COPPER (SULPHATE).—Lower, the demand having fallen off considerably. The price in London now runs from 14l. 15s. per ton for ordinary to 15l. 10s. per ton for the best brands. In Liverpool 15l. f.o.b. will buy. At the annual meeting of the Wallaroo and Moonta Mining and Smelting Company (South Australia) the Chairman announced that the manufacture of sulphate of copper had been started on a small scale, but the buildings and plant were being extended.

CREAM OF TARTAR.—There has been a considerable improvement in the price of this article since last week. Supplies on the spot are scarce, and 65s. per cwt. must be paid for best white *French* crystals. Powder may still be had at 66s. per cwt. The quotation f.o.b. Barcelona is 61s. to 61s. 6d.; f.o.b. Bordeaux 62s. per cwt.

GINGER.—Prices are easier all round, with a dull market. At auction 677 barrels *Jamaica* ginger were offered, of which only a small percentage sold at 85s. for good bleached; 66s. to 73s. for medium to good medium; and 56s. 6d. to 64s. for ordinary to dull. Of 1,545 packages *Cochin* ginger a few lots sold at 90s. per cwt. for fine bold A cut; 48s. for fair washed rough; and 37s. to 42s. per cwt. for ends and cuttings. Lined mouldy rough *Japan* ginger sold at 37s. to 37s. 6d.; *Bengal* (without reserve) at 31s. per cwt.

GUM (ACACIA).—At to-day's auctions there was a heavy supply of East Indian gums, of which only a very small quantity found buyers, fine *Ghatti* realising full prices, but other descriptions being generally lower—Bombay-Aden showing a fall of about 5s. per cwt., and Cawnpore gum being from 3s. to 4s. lower. The following prices were paid:—*Bombay-Aden*, olibanum scented, fair red, 28s. 6d.; *Oomra*, good bright glossy, 27s. 6d.; *Ghatti*, fine pale picked, 41s. to 43s.; good bright, 30s. to 35s.; *Kurrachee-Amrad*, fair amber, small mixed, 34s. 6d. to 36s.; fine soft sittings, 23s. 6d. to 25s.; *Aden* gum brought 30s. for good pale and amber, partly bold, mixed frosted. About 200 packages so-called insoluble *Persian* gum sold at very low rates, without reserve—namely, from 9s. 6d. down to 3s. for sorts to common blocky: 16 cases fair Soudan sorts from Massowrah, good pale and amber mixed soft, realised 40s. 6d. to 41s. About 50 packages *Cape* gum realised from 35s. to 37s. for soft ambry, 27s. for brown, and from 29s. 6d. to 33s. for pale dust and sittings. Good bold red frosted *Australian* realised 23s. 6d. to 24s. 6d., fair red 19s. 6d. per cwt.

HEAVY CHEMICALS.—The following are the present manufacturers' quotations for some of the principal heavy chemicals f.o.b. Liverpool, in the usual packages. In some cases the figures can be shaded from second-hand holders:—

Ammonia alkali, 58 per cent.,	3l. 15s. per ton net.
Bicarbonate of soda, 6l. 15s. per ton, discount $2\frac{1}{2}$ per cent.	per ton net.
Bleaching-powder, soft woods, 7l. 15s. per ton net.	
" " hard woods, 8l. per ton net.	
Caustic soda, 70 per cent., 8l. 10s. to 9l. per ton net.	
" " 60 per cent. (white), 7l. 10s. to 8l. per ton net.	
" " (cream), 60 per cent., 7l. 8s. to 7l. 15s. per ton net.	
Chlorate of soda, 8l. per lb., discount 5 per cent.	
" baryta, 10 $\frac{1}{2}$ d. per lb., discount 5 per cent.	
" potash, 7 $\frac{1}{2}$ d. per lb., discount 5 per cent.	
Crystal carbonate, 6l. 7s. 6d. per ton net.	
Chloride of calcium, 2l. 5s. per ton net.	
" magnesium, 2l. 10s. per ton net.	
Soda ash, caustic, 57 to 58 per cent., 4l. 5s. per ton net.	
" carbonated, 58 per cent., 4s. 5s. per ton net.	
" " 58 " Le Blanc quality, 4l. per ton net.	
Soda crystals, in usual barrels, 2l. 15s. per ton, discount 5 per cent.	
Sulphate of alumina, 5l. to 5l. 10s. per ton net.	

INSECT-FLOWERS.—Nothing has yet transpired with regard to the new crop. The quotations at present are about 111s. for closed, 78s. for half-open, and 60s. per cwt., c.i.f. terms, for open flowers. There have been rather heavy arrivals of insect-flowers and powder from Trieste during the last few days. These arrivals are all of the old crop. The harvest, which is now being gathered, will not be ready for shipment for several weeks yet.

LINSEED.—Firm at 40s. for ordinary to 45s. per 416 lbs. for good bright River Plate seed. The supply of Canadian linseed is at present exhausted.

MENTHOL.—The market is on the rise. It is still possible, we think, to buy on the spot at 17s. 6d. per lb.; but from Japan much higher prices are reported, and there is practically nothing offering for shipment.

OIL (COD-LIVER).—A small parcel of non-freezing new season's Norwegian Lofoden oil has been sold to-day at 110s. per barrel.

OIL (OLIVE).—Reports from Italy announce an advance in eating-oils.



**OILS (ESSENTIAL).**—Japanese *Oil of peppermint* is firmly held at 11s. 3d. per lb. for 40-per-cent., and 10s. 3d. per lb. for dementholised oil, on the spot. *Star-anise* oil has been sold at 6s. 5d. per lb. on the spot.

**OPIUM.**—The London market is unaltered, and very little is being done. The quotations remain:—*Soft shipping*, fair to fine, 11s. to 11s. 9d.; *Druggists' seconds*, 8s. 6d. to 9s.; *Smyrna* qualities, good to fine, 9s. 6d. to 10s. 6d.; *Persian*, 9s. to 11s. per lb. Our Smyrna correspondent, writing on May 31, thus describes the course of the opium market in that port during the month under review:—"Our opium market, early this month, opened very firm with steady rising prices, but by May 14, owing to a total absence of business the previous week, our small bazaar dealers again showed great anxiety to make progress; and being pressed by their bankers to sell, were at last obliged to accept buyers' terms, and gradually took as low a price as 8s. 5d. per lb. Our large holders have not sold anything under 9s. 6d. The total opium sales of the month amount to 99 cases. The prospects for the coming crop are, on the whole, very good, owing to the favourable weather we have had during April and May, the like of which, since the year 1865, this country has not enjoyed. Since that date there has not been such a successful spring opium outturn. New opium will be ready for shipment at the end of July. The loss in weight of new opium is 4 per cent. gradually decreasing its loss until August, when it is only 1 per cent, or a difference of 1d. per lb., at present value of 8s. 6d., between the old and new drug." Another correspondent, writing on June 2, announces a dragging market, the sales for the week ending that day being only 11 cases—*Karakissar* tale quale at 8s., *Yerli* ditto at 8s. to 8s. 3d. per lb., f.o.b. The first three cakes of opium have been received, and show a slightly better quality than last season, the colour is very fine. These arrivals are from the districts of Koula, Alecsheir, and Enigenel, which generally yield a very poor quality. An official report from Ispahan, just published, observes:—"In late years there has been a decided decrease in the output of opium in Persia. A few years ago an average crop would be returned at 4,000 boxes; in 1889, a fair year, it was about 3,000; in 1893 it was only about some 2,000. It appears that Persian opium has lost some of its hold on the China market, and that the cultivator here is exhausting his soil. Year after year he plants the same succession of crops, reaping sometimes as many as three crops a year. He does not plough deep, nor does he manure heavily, but only top-dresses; in consequence it is found that a jereb which used to give crop of 2 mans, now only gives from  $\frac{1}{2}$  to  $\frac{3}{4}$  man of opium. For the present year (1894) an area has been planted which is calculated to give some 2,500 boxes. It is anticipated that in the following year a very much larger quantity will be planted. The Persian merchants are looking with keen and anxious eyes to the proceedings of the Opium Commission in India, and their future conduct will be greatly biassed by its report. A certain portion of the crop is specially manufactured for consumption in the local markets of the country, and is almost entirely supplied by Yezd. It is made into sticks and is used for smoking and eating. Opium-smoking is very prevalent in Yezd, the province which produces the bulk of the Persian crop, and it is said that more is used in this place in that way than in any other town in Persia, with the single exception of Kerman. This habit is gaining ground daily throughout the country. In years past adulteration of the drug was very common, but owing to many and heavy losses, by having his cases thrown on his hands, or else being sold at 50 per cent. under current rates, the Persian merchant has in this case learnt wisdom, and has discontinued the practice.

**PERMANGANATE OF POTASH.**—The syndicate quotation of 67s. 6d. to 70s. per cwt. for large, and 62s. 6d. to 65s. per cwt. for small, crystals still remains in force. There is, however, a heavy stock in the control of second-hand holders, some of which seem rather anxious to sell.

**QUASSIA** has advanced, and the tendency is still upward. Logs may be had at 7l. 5s. in large quantities, but for smaller parcels 7l. 10s. per ton is asked.

**QUICKSILVER.**—Unaltered and firm. Importers still quote 6l., second-hand holders 5l. 19s. per bottle. Since our last report no less than 7,901 bottles of mercury have arrived from Spain. Shanghai imported in 1892 2,591 piculs of mercury (value 161,715 Hk. taels), and in 1893 1,292 piculs value 82,780 Hk. taels).

**QUININE.**—Very little, if any, business has been done this week. There are buyers of second-hand at 10 $\frac{1}{2}$ d. per oz.; makers' quotations are unaltered.

**TURMERIC.**—At auction on Tuesday a considerable quantity of *Madras* turmeric was offered, about one-third of which (320 bags) sold at a decline of from 1s. to 2s. per cwt. Very bold but dull in colour and fracture, 12s.; good to fine hard finger mixed with bulbs, 16s. to 17s. per cwt. *Bengal* turmeric was also lower, medium quality realising only 10s. 6d. per cwt.

#### QUICKSILVER MINING IN TUSCANY.

THE quicksilver mines of the district of Monte Amiata rank amongst the most valuable and important mineral resources of Tuscany. Monte Amiata, the Mons ad Meata of the ancients, is situated in the province of Grosseto, 36 miles from Siena.

The mines are found to the south-east of the village. It has been clearly proved that cinnabar (the ore of quicksilver) was known to the ancient Etruscans, red mercurial pigments having been used by them in decorating their vases and in such paintings as the frescoes in the rock-tombs of the cities of Saturnia and Sorana. Moreover, in the mine of the Siele, stone implements have been found which are held to afford proof that the cinnabar ore there was worked in the Flint-Age. In 1878, when a French company were carrying on prospecting operations in the vicinity of Castell' Azzara, some human skeletons were found in the course of driving an adit, and close by them a gold coin bearing the inscription of Philip of Macedon. These facts would point to the conclusion that the cinnabar deposits of the Monte Amiata were known and to some extent worked at a period of extreme antiquity.

The revival of mining operations in this district dates from the year 1846, when the accidental discovery of some pieces of rich cinnabar in the bed of a torrent induced a speculator to acquire the mining rights over the surrounding lands, and subsequently to form a small company for the purpose of searching for quicksilver. No satisfactory results were obtained, and with the exhaustion of the small capital of about 1,200l., operations ceased. After various vicissitudes the property was bought at auction, in the year 1865, by a Jewish merchant of Leghorn, Signor Rosselli (whose family hold it to the present day), for about 3,000l.; but no one then could have foreseen the brilliant future in store for the mine.

In fact, in the year 1866 it produced only 58 cwts. of quicksilver, of the value of about 600l. But gradually the yield increased until, in 1876, the production reached 1,908 cwts., while in 1890 the Monte Amiata district produced 8,837 cwts., of which quantity about 85 per cent. came from the Siele mine, the balance being the production of some mines of secondary importance in the same district which were discovered more recently. The total production of the quicksilver of Monte Amiata during the years 1866-93 is put at 86,507 cwts., of the approximate value of 800,000l., the great bulk of which has come from the Siele mine, which remains to the present day as productive as ever.

The splendid success of this mine, while it stimulated research for the same mineral in the surrounding territory, which in some cases has met with favourable results, was also the cause of a plentiful crop of lawsuits before the Italian Courts, involving disputes as to the rights of property in the mine; but prolonged litigation proved that the title of its present proprietors could not be successfully called in question.

In connection with quicksilver mining it may be mentioned that some 50 years ago quicksilver was discovered at a place called Capita, about 12 miles from the town of Orbetello, on the south-western boundary of the province of Grosseto. A mine was opened up under the management of a Cornish mining "captain" named Davy, and for account of an Englishman. Some quicksilver was produced, but for some reason or other the work was abandoned in 1867, and continued so until 1893, when the mining rights were acquired by Messrs. Rae Brothers, of Leghorn, and operations of a prospecting character were commenced. The geological formation is the same as that of the mines of Monte Amiata, and the abundant indications of cinnabar met with so far, encourage the expectation that the mineral in paying quantity will be found as the workings advance.





### Memoranda for Correspondents.

*In letters for publication correspondents are requested to express their views as concisely as possible.*

*Correspondents should write on one side of the paper only, and devote a separate piece of paper to each subject of inquiry.*

*The name and address of the writer should accompany all communications, with, if desired, a distinctive nom-de-plume.*

### The Maragogipe Coffee.

SIR,—Thanks to the careful index of events which you keep at the office of THE CHEMIST AND DRUGGIST, I remark the notice of a new coffee on page 773. You are perfectly right that I did introduce Maragogipe coffee many years ago, but I found out from a friend of mine in Brazil that it was no use taking the coffee-berries for a plantation from young plants. I received from one of the original growers of this special variety several bushels, and I have no doubt I should have been able to get more. The demand for this special seed of coffee was so great that my friends here urged me to telegraph to my correspondent for more. I did so, and my telegram arrived at its destination in the middle of the night. It caused the receiver such a shock, owing to the Government officer declaring that it was necessary that the telegram should be received, and the proper time recorded of its arrival. My friend expostulated from the window that he had better leave it till the morning. He said that the English were so exigent that it was absolutely necessary to record the time of receipt and obtain the signature. Suffice it to say that this native gentleman wrote us saying that he would have nothing more to do with collecting and sending us the Maragogipe seed after the shock his nerves had sustained from receiving this telegram during the night. Knowing the history of this Maragogipe seed, with the assistance of friends here I obtained two or three other shipments, varying from one to four bushels each; but they mostly proved disappointing, because the seed had evidently been gathered from very young trees, and not from the old standard trees which I had previously received it from, and, although my friends wanted more seed, I declined to supply it.

Your indefatigable collector of material for THE CHEMIST AND DRUGGIST will remember that some months ago I showed him a sample of coffee-seed, remarkably small, that came from Sierra Leone, on the West Coast of Africa, and I also informed him that Mr. G. F. Scott Elliott had found as many as fourteen new varieties of coffee on the West Coast. The information I gave to your representative was that I believed that this coffee fetched a high price on account of its being small, and resembling the coffee known as Arabian mocha. This very small-grain coffee, called mocha, is got from India, and the bags are left in the hot sand to shrivel up the grain, which takes time and costs more. This small seed from West Africa I thought was to be palmed off as very old mocha, but time has shown me the mistake. It fetches, however, a very high price in Paris; and when carefully roasted it has a peculiar, bitter taste, which greatly improves the flavour of the best coffee-mixtures (I allude, of course, to genuine coffee). In the London market, where it has been sent after being collected by owners of caravans, the brokers not understanding it have sold it at 6d. and 8d. per lb. I traced out what became of this coffee, and who were the buyers here, and I found that the same people who buy the very highest class of coffee—namely the Blue Mountain coffee of Jamaica—bought this coffee, and they well knew what they were about. This coffee is used in the Black Country and the north of England, and for this reason: that a small quantity of this coffee put with “rubbish,” composed partly of the common coffee and other material, fetches up the flavour, and is the cheapest in the end for this object. Poor Mr. Esput, of Jamaica, who grew the finest Jamaica coffee, used to lament the fact that all his coffee went into the hands

of these people instead of coming into the London market and being appreciated at its value for flavour.

If I have not transgressed on your space too much I would like to add that an almost equally valuable coffee is found on the East Coast of Africa, near Inhabane. From this place I have also obtained seed, and I can testify to the coffee being of the very highest quality. Mr. Hornung, who lives on the Zambesi, informs me that they always try to get some of this small-grain coffee to mix with the ordinary *Coffea arabica* because it fetches up the flavour. These small coffee-seeds I have introduced into Ceylon and into India. I am collecting large supplies of seeds for other planters who have got plants from my first seed. These facts will show you that there is plenty of work left for collectors and introducers of new food products to do, and the confirmation by the Director of Kew is very valuable to planters.

Yours truly,

THOS. CHRISTY.

June 1.

### The Opium-crop.

SIR,—The editorial article on the opium market and crop in your issue of June 2 is very interesting, but may I be allowed to point out several discrepancies contained therein? Firstly: The stock of opium in Constantinople is 350 to 400 cases maximum, and not 700 cases as your correspondent states. The stock in Smyrna is far nearer 1,000 than 1,400 cases—in fact, the general idea points to only 900 cases.

Secondly: Last year's crop was 3,000 cases, as is amply proved by arrivals into Smyrna to date 1,419 cases, and into Constantinople 1,213 (after deducting 100 cases which were forwarded from former to latter town), and into Salonica 200 cases, which sums up to 2,832. Assuming that 200 to 300 cases utmost remain inland, the total of 1893 crop reaches 3,000 cases of 60 okes, or 169½ lbs., each.

Your correspondent at the end of his report puts down the yield of 1894 crop at 6,500 certain, and perhaps 8,000 cases, and yet on working out his “most careful estimates” as below, I can only find a yield of 5,540 cases (and this after taking “per cent.” to mean 120 as your correspondent has done).

He states:—

	Cases
12 per cent. will be one-fourth of last year's yield, say	90
10 per cent. will be one-half of last year's yield, say	150
40 per cent. will be the same as last year's yield, say	1,200
45 per cent. will be double last year's yield, say	2,700
13 per cent. will be largest on record yield, say	1,400
120	5,540

Let us, however, assume that 40 per cent. (the same as last year) was intended for 20 per cent. (this to give per cent. its literal meaning); then his estimate would be reduced to 4,940 cases—or, on the other hand, if 45 per cent. (double last year's) was intended for 25 per cent., the yield would then be 4,190 cases. This is, to say the least of it, exceedingly conflicting information. In December last opium dropped down to 8s., and later, on the strength of the reported American duty of \$1.00 per lb., it went up with a rush. In my humble opinion—and no doubt Americans themselves will confirm it—this and this alone induced the United States to buy so heavily at up to 10s. and 11s., and not the “hlatant bawl of the hull speculator.”

An ample proof of this is the fact that all orders from the United States during January, February, and early March were given subject to immediate shipment. Does this savour of anything except getting opium into the United States before the proposed tariff became law?

Americans still retain their old ‘cuteness, and it is not reasonable to infer that they lay in such immense stocks merely on the report of a small crop.

Not a bit of it. The “almighty dollar,” and the Americans themselves are alone to blame for their extensive purchases and consequent apparent losses. It may interest you to know that the weather this spring has been exceptionally favourable to late winter and spring sowings. In several parts opium has already been gathered, and I just learn that at Gueve “new” is being bought at the party of 7s. 4d. f.o.b.

Yours truly,

Constantinople, June 8.

VERITAS. (62/38.)



## An Explanation.

SIR,—In your issue of June 9, "report of sweet spirit of nitre case at Barnsley," it states that the nitre was sold by us in September last. This is an error; the date should be September, 1892. In justice to ourselves we think this correction should be inserted in your next issue.

Yours, &amp;c.,

Leeds, June 8.

SMITH, DIXON &amp; LODGE.

## Betting in Pharmacies.

SIR,—On page 788 of your current issue there is reference made to the "rencontre" between Rev. G. E. Ford and his correspondent in the *Bristol Mercury*. I feel sure that the proceduro of the rev. gentleman will be resented by the body of Bristol chemists.

In examining this matter it is not necessary to assume that the Vicar of Holy Trinity has made any actual misstatements. Nevertheless the method is illogical and dishonourable. It is asserted of one or more chemists in this city that they have caused their premises to be used for betting on horses. On a public occasion reference is made to this in such general terms as will apply to any or all of the chemists in Bristol. Obviously, such language as would lead to identification is inexpedient because it would possibly entangle the speaker in the meshes of the libel law. Hence the inclusive statements.

\*The method is not new, but its evidential value is *nil*. To the judicial mind it is bad, and would not be tolerated in any court of justice.

Yours truly,

Clifton, Bristol.

T. C. RICHARDS.

## A Chance for Major Men.

SIR,—at a time when we are hearing so much about the Major men and the opinion held by the general public as to the title "pharmaceutical chemist," perhaps the following paragraph, which is obtained from the prospectus of a school of science in one of our large towns, issued by the Town Council and signed by the Town Clerk, will further confirm the view that the title "pharmaceutical chemist" conveys no meaning whatever of higher qualification, but according to the enclosed paragraph is only a stepping-stone to the Minor. It runs as follows:—

"Pharmaceutical chemists will find that the classes in chemistry, botany, and materia medica will enable them to prepare for the Minor pharmaceutical examination without the necessity of spending three or six months in special coaching just before the examination takes place."

Yours &amp;c.,

A PHARMACEUTICAL CHEMIST. (58/14.)

[The quotation is from a prospectus of classes issued by the Brighton Town Council.]

## Liq. Taraxaci.

SIR,—Without entering into a discussion as to what should be dispensed when liq. taraxaci is ordered in a prescription, I beg to give you my experience with regard to the colour of the official liquid extract.

There is no doubt that when prepared strictly according to the B.P. directions from "the dried root in No. 20 powder" it is light in colour—reddish brown, I think, would best describe it; but I feel sure that the majority of medical men and chemists expect a much darker preparation, and would at once return the above.

I have generally seen this liquid extract prepared by exhausting thoroughly with water an equivalent of the fresh root gathered in September or October, evaporating the solution at a low temperature, and adding the official proportion of spirit.

Whether or not manufacturers are justified in departing from the strict letter of the Pharmacopœia is a point that has been so often discussed in THE CHEMIST AND DRUGGIST, but I think you will agree with me that the sample sent herewith is a preparation one part of which more closely represents one part of the dried root than the reddish-brown solution obtained by the official method.

Believe me, yours sincerely,

Leicester, June 11.

PHOSPHATE. (62/67.)

SIR,—In response to your invitation for the opinion of manufacturers as to the colour of the above preparation, I may mention that I have made or seen many samples, but have never met with one which could be described as "a pale, sherry-coloured liquid, lighter almost than succus tarax." The liquid extract varies considerably in colour, this variation being probably due in part to the interpretation put upon the imperfect directions given in the B.P. for its preparation. The original "liq. tarax." was, I believe, a special preparation of the late Mr. P. Squire, and was rather paler than the succus of the B.P.

I am, yours faithfully,

Hayward's Heath, June 12.

RICHARD A. CRIPPS.

## Homœopathic Medicines and the Medicine-stamp.

SIR,—Where are you to draw the line? It may be rash to venture an answer to this query, but if a book given away or sold (by a manufacturer in his own interest) be not a "public notice or advertisement," it would seem to consist of "written or printed papers"—unless it be an uncut sheet, and the words quoted in *Alpe*, p. 14, may be construed in the plural only. We think an answer to your interviewer's question, "What does Somerset House say?" would be the item of advantage to chemists just now. The disjunctive particles, and the commas, in the "tail of the Schedule" to the Medicine Act, should always be remembered as having a very distinct value whenever a question of medicine-duty liability is raised.

Yours faithfully,

June 11.

F. NEWBERRY &amp; SONS

## Chemists as Apothecaries.

SIR,—Your reply to "Puzzled" would be anticipated by any chemist, but another question bearing on the same topic needs a more satisfactory explanation. How is it a chemist dare not look at a patient's tongue and prescribe without running a risk of coming to close quarters with the Apothecaries' Society, whilst unqualified men trading as herbalists' drug-stores advertise their abilities to cure diseases apparently without any molestation? They may claim they only prescribe herbs, but that is all nonsense, as I have known of two or three cases where scheduled poisons have been used. A gushing youth has taken rooms, where he visits twice a week to see patients, and purchases Parrish's syrup of me. He laughs at any interference, and yet we, who have had more methodical training, dare not encroach on these sacred rights without the risk of direful consequences. Is not the arm of the law long, and strong enough to reach one as well as the other?

June 12.

Yours truly,

MAG. CIT. (63/32.)

[A great many herbalists and other irregulars have been prosecuted by the apothecaries. The proportion of those prosecuted has been quite as large, we should think, as of prescribing chemists.]

## Should Enclosures be Charged For?

SIR,—It would be an advantage to have some arrangement whereby all the trade should be subject to the same rule with regard to enclosures.

Up to the present we have received enclosures gratis for any of our customers, even when, in some few instances, we have, at the request of the sender, given a receipt for them. Quite lately we have sent enclosures to other wholesale houses, and have been charged 2d. by them for receiving. We should like to hear an expression of opinion from the trade on this irritating subject. We know that charging is of common occurrence in the stationery-trade, where enclosures are very numerous. We also know that profits are very closely cut nowadays, but we question whether the charging for enclosure will make a difference that will balance the irritation caused by the charge.

We are, dear Sir, yours faithfully,

June 12.

G. B. KENT &amp; SONS.



## DISPENSING NOTES.

*Correspondents should consult "The Art of Dispensing" in regard to dispensing difficulties. Difficulties not explained therein may be sent to the Editor, who invites a general expression of opinion upon the under-mentioned topics.*

## Cocaine, Codeine, and Carbolic Acid.

61/67. *Perplexed* had the following to dispense:—

Aq. laurocerasi .. .. .	3ij.
Ac. phenic. .. .. .	gr. iss.
Cocain. hydrochlor. .. .. .	gr. xv.
Codeinas pur. .. .. .	gr. viij.
Aqua ad .. .. .	3j.

This formed a clear solution with hot water, but on cooling becomes cloudy. When dispensed elsewhere, a permanent clear solution was formed.

[The cloudiness is due to precipitation of the codeine, it being soluble in not less than 80 parts of cold water: the prescription shows 1 in 60. Possibly hydrochlorate of codeine had been used by the previous dispenser. This would carry out the intention of the prescriber, and being readily soluble forms a permanently clear solution. Or the pure codeine might be dissolved in a little rectified spirit and added to the solution of the other ingredients. The strength of the hydrochlorate, however, being much the same as the pure alkaloid, the use of it would perhaps be the more satisfactory way, if not objected to—a note being made on the recipe to this effect.]

## LEGAL QUERIES.

*Immediate information on pharmaco-legal matters is available in "Pharmacy and Poison Laws of the United Kingdom," Alpe's "Handy-book of Medicine-stamp Duty," and THE CHEMIST'S AND DRUGGISTS' DIARY.*

59/40. *G. M.*—The Customs Laws Consolidation Act, 39 and 40 Vict. c. 33, gives authority to contractors to add any extra duty (on spirit, &c.) to their charges as contracted for. For fuller details see Mr. Umney's communication on the spirit-duty in THE CHEMIST AND DRUGGIST, April 28, 1894, page 578.

61/52. *Coddendam.*—When the indentures specify that the apprentice is to be allowed a fortnight's holiday annually, but do not indicate that he is to be allowed to choose his own time, it would, no doubt, be held that the master could select the period most convenient to his business, and if he insisted on giving two separate weeks we do not think the apprentice would have any substantial claim against him.

62/39. *Be Fair.*—You do not specify what part of a grocer's business you think might be stopped if we had "such an association as the doctors have, formed among the chemists themselves." Grocers are being stopped from selling poisons or compounds of poisons. You cannot do more by means of associations without a new Act of Parliament, and you will not be able to get an Act to prevent competition in ordinary drugs.

62/25. *Cupri Sulph.*—Your pill being made from a Pharmacopœia chemical does not free it from duty. It may be exempt on the ground that it is "vended entire," but we think the Board would consider that the excipient, whatever it may be, made a compound of it. Send your exact formula to Somerset House and ask the question.

110/38. *Ajax.*—Neither bitter almonds nor salts of lemon are scheduled poisons. The essential oil of almonds, if it contain prussic acid, is. We cannot in future give space to answer such elementary questions about the Pharmacy Act. Get our "Pharmacy and Poison Laws," 2s. 6d.

62/23. *R. R.*—Your question is answered in Alpe's "Handy-book of Medicine-stamp Duty" thus:—"The element of sale governs the liability to duty, and therefore medicines distributed gratis as samples are not liable."

62/31. *Cymro* writes:—"A, a medical man, has a prescription for lozenges, and has allowed B, a chemist, the privilege of making them and selling them stamped with the simple surname of the doctor. They have never been put up as a proprietary. Now B has lost A's favour, and the latter has asked C, a chemist, to make him an offer for the recipe. If C buys it, can B be prevented from making and selling the lozenge?" It depends on what agreement, expressed or implied, had been entered into between A and B. If there was none, except that it was understood that A was the proprietor of the lozenges and B his agent, A can no doubt transfer the right to the exclusive use of his name to C; but he cannot take out of B's head the knowledge that is there, nor can he prevent him making up the same lozenges under some other name unless the composition had been patented.

63/26. *M. S.*—There is no pharmacy law in India. We cannot give you details of the medical curriculum in the Indian Colleges.

64/9. *J. M. C.*—You cannot do anything now. You might, perhaps, have defended the case better; but it is no use worrying about it now that it is settled.

## MISCELLANEOUS INQUIRIES.

*The Editor replies to queries of general interest, in the order in which they are received. Replies are inserted according to the space available. Postal answers cannot be supplied.*

*Back numbers containing formulæ, educational or other specific information can be obtained from the Publisher.*

49/17. *Hope.*—Hop Stout.—To a solution of brown sugar 1 lb. and liquorice-juice 4 oz. in 2 gallons of water, add the following mixture, and ferment with yeast in the usual way:—

Tincture of hops .. .. .	3ss.
Oil of cinnamon .. .. .	℥v.
Ess. of jargonelle pear .. .. .	℥x.
Tincture of capsicum .. .. .	3ss.
Conc. infusion of quassia to .. .. .	3j.

48/68. *Quærens.*—Brook's "Herbal," a shilling book (Potter & Clarke), may suit your purpose. There are more expensive books, such as Barton and Castle's "British Flora Medica," which can now be bought for 7s. 6d.

47/21. *Rad.*—(1) To Colour Ivory follow the directions for billiard-balls given on page 378 of our issue September 2, 1893. (2) Flour of Aniseed.—Various formulæ are used in Scotland for this. The following is typical:—

Ol. anisi .. .. .	gtt. vj.
Mag. carb. levis .. .. .	3ij.
Pulv. sacch. alb. .. .. .	3vj.

Triturate the oil well with the magnesia, add the sugar, and sift.

60/71. *Fancier.*—Sample of Food for Producing a Yellow Colour on Canaries (cayenne not being necessary) consists of turmeric, ground rice, and a small proportion of sugar, in small crystals, such as is generally used in the preparation of ginger-beer powder.

3/6/94. *Veterinary.*—Your ointment has a resinous base, a trace of cantharides, and a little of a brown powder we cannot identify.

52/28. *Cottonopolis.*—The Grease-eradiator paste does not appear to be anything more than soap thinned by boiling water and scented with sassafras.



60/65. *Discipulus* does not give his name. He should read the report of the meeting carefully.

47/59. *Sponge*.—(1) To remove green coloration from teeth peroxide of hydrogen should be used, or, better still, a solution of sodium peroxide, which we have heard is used by dentists with remarkable success. You might try a 20-per-cent. solution, increasing the strength if necessary. (2) The Tic and Headache Powder consists of phenacetin coloured with turmeric. The half-powder you send would correspond to a 6-grain dose, which is quite a safe quantity. (3) Stomach and Liver Mixture to suit your label :—

Acid. nitro-mur. dil. . . . .	℥80
Spt. chloroformi . . . . .	℥80
Tinct. gent. co. . . . .	3ij.
„ aurantii . . . . .	3ij.
Aq. destillat. ad . . . . .	℥viii.

Filter bright. Two tablespoonfuls three times a day.

29/5/94. *Westgate*.—Are you referring to the formula for Oak-varnish given in our issue of February 3, 1894, which you complain is too thin? The addition of a pint of Canada balsam to the gallon would impart more body. We give another formula below which gives a thicker varnish, but you will hardly be likely to succeed without proper varnish-maker's plant :—

Gum copal . . . . .	8 lbs.
Melt and mix with—	
Linseed oil . . . . .	3 galls.
Then add—	
Dried acetate of lead . . . . .	½ lb.
Litharge . . . . .	¼ „
Well boil, and thin with—	
Turpentine . . . . .	5½ galls.
Let stand to clear, and strain.	

This gives a quick-drying varnish.

53/19. *Asphodel*.—Your Shampoo-powder is composed of coarsely-powdered washing-soda and powdered soap, about equal parts, scented with oil of citronella.

50/36. *Pharmacist*.—The Wash for Red Spider on hop-plants and fruit-trees is a solution of sulphurated lime made somewhat as follows :—

Sulphur . . . . .	℥ij.
Calcis hydras . . . . .	℥ij.

Boil together in a gallon of water for ten minutes; allow to settle; then pour off bright, and make up to 1 gallon.

You do not give us any information as to how it is used or the degree of dilution.

47/29. *Blister*.—We cannot make out what your powder consists of.

48/10. *Belgrave*.—Rupture-lotion supplied by a quack consists of zinc sulphate, liquid ammonia with an iron precipitate (probably contained as an impurity in the zinc), and water.

17/79. *Chemicus*.—We doubt if you have copied quite accurately the inscription upon your Old Violin. We should say that it stands for Giovanni Paolo Maggi, of Cressia (the name and address of the maker), and the year 16—.

63/20. *Sedax*.—We cannot explain why the gentleman has not replied to your letter. Write to him again.

63/6. *H. E. C.*—You might give exact reference when you refer us to a formula we have published. You can only disguise the paraffin odour in the red spider wash for vines by something stronger, which is hardly desirable. Call it "Vine-wash," if you want a simple descriptive title.

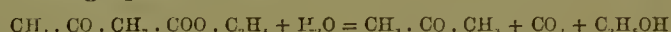
61/58. *Caryophyllus*.—For green flies on fruit-trees use the paraffin emulsion recommended on page 606 of this volume (April 28). Or see answer to "Pharmacist," above.

#### INFORMATION SUPPLIED.

For this section we are always glad to receive from subscribers brief notes on practical subjects, recipes which have been found good in practice or which have required modification, and hints or fresh ideas on any pharmaceutical or trade matter.

Meetings, &c., to be held, and business to be transacted thereat. Suitable notices will be inserted in this section if received by the Editor on or before Wednesday.

Acetone in Urine.—In your answer to "J. F. W." you give two tests for acetone in urine. The one which you recommend as the better is Lieben's. I should like to point out that, whilst Lieben's test is very delicate in detecting traces of acetone in distilled urine, it is by no means an indication of acetone in the original urine. For example, diabetic urine (which seldom, if ever, contains acetone) contains aceto-acetic ester. On distilling this with either alkalies or acids decomposition occurs according to the following equation :—



And urine containing this compound invariably yields acetone in the distillate. Is the presence of acetone as such in the urine definitely proved?

40 Craven Street, June 2.

ERNEST J. PARRY.

[Indications of acetone are given even by normal urine—i.e., when the iodoform precipitate is examined microscopically.]

Blackbeetles.—I am sorry to disagree with your answer to "Serox." Blackbeetles are not difficult to get rid of. Borax is not generally fatal to them. Your formula is as useless as the traps you refer to. At least, such is my experience [but not ours.—ED.]. You published the formula before, and I prepared and sold and tried it myself. My verdict, and that of my customers, was that it was a splendid thing—for the beetles. No; get ½ lb. of Dalmatian insect-powder, so that you can use freely, say, 2 oz at a time, and stuff well into their breeding-holes. Do this every second night until all is used. A few beetles will have escaped. A month later repeat.

GILGEN. (61/43.)

#### INFORMATION WANTED.

The Editor invites, on behalf of inquiring subscribers, postcard replies to following :—

98/7. What is "skunk's oil"?

64/37. Wholesale vendors of B. B. B. briar pipes.

#### Next Week.

Meetings, &c., to be held, and business to be transacted thereat. Suitable notices will be inserted in this section if received by the Editor on or before Wednesday.

Friday, June 15.

Quekett Microscopical Club, 20 Hanover Square, W., at 8 P.M.

Wednesday, June 20.

Western Chemists' Association, at 9 P.M. Meeting at the Westbourne Restaurant, 1 Craven Road. Discussion, "The proposed alteration in the method of electing annuitants to the Pharmaceutical Benevolent Fund," introduced by Mr. R. H. Parker, Vice-president of the Association.

Thursday, June 21.

Chemical Society, at 8 P.M. "The Specific Character of the Fermentation Functions of Yeast-cells," by Adrian J. Brown. "The Interaction of Lead Sulphide with Lead Sulphate and Oxide," by J. B. Hannay. "The Oxidation of Tartaric Acid in Presence of Iron," by H. J. H. Fenton. "The Relation between the Solubility of a Gas and the Viscosity of its Solvent," by Professor Thorpe, F.R.S., and J. W. Rodgers; and other papers.



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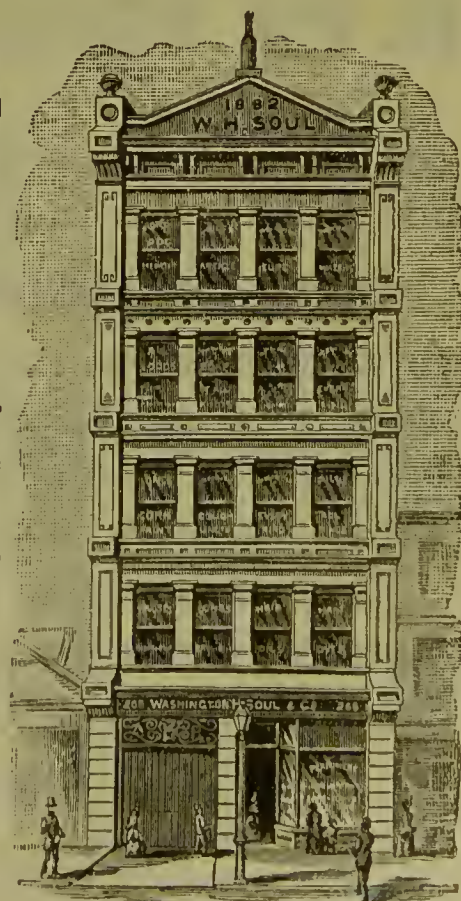
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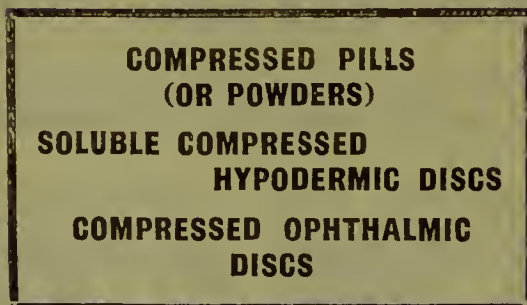
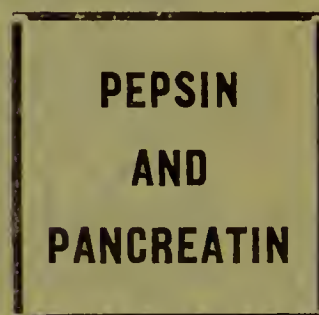
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1=32

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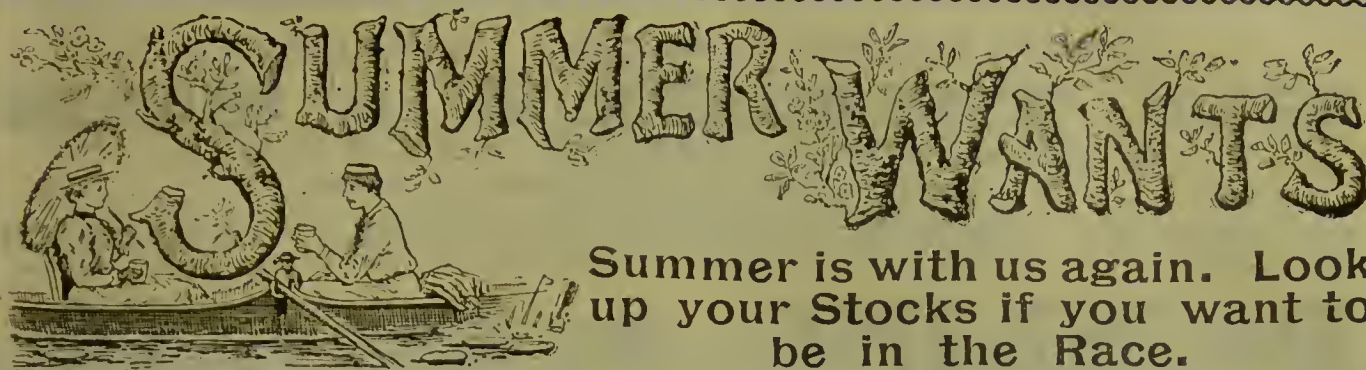
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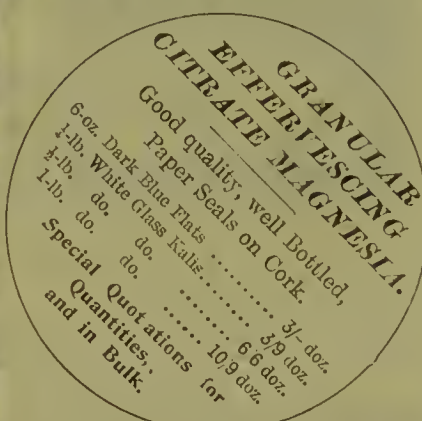
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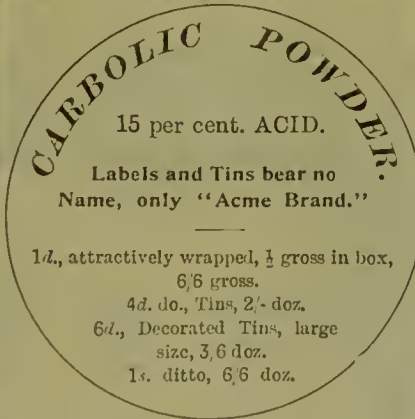
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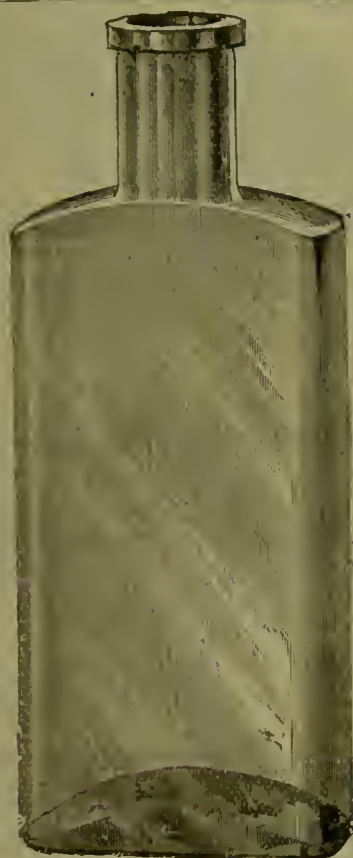
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The Grease-Proof Covered Pots have perfectly-fitting lids, are practically unbreakable, and the only articles really answering the purpose intended.  
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**BEST QUALITY,**

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$\frac{1}{2}$	1	$1\frac{1}{2}$	2	3	4 oz.
4/4	4/6	5/3	6/-	8/-	9/3 per gross.

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	White glass	2/6 per gross extra.		
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	White Glass	3/- per gross extra.		

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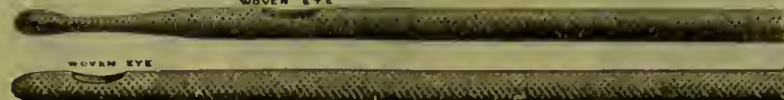


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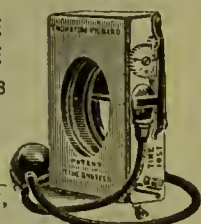
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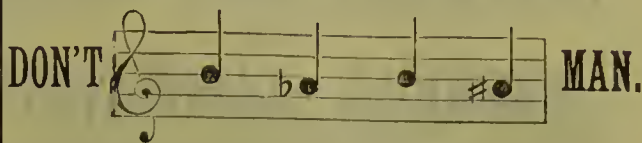
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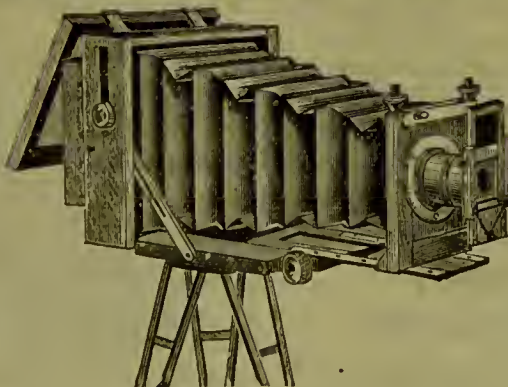
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The Fly Paste for own  
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Tins at 2d.

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**1d.**  
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IS NOT OFFENSIVE TO THE SIGHT.  
Catches more Flies than Sticky  
Papers.  
DOES NOT SPOIL BY KEEPING.  
**GOOD IN ANY CLIMATE,**  
Therefore specially suitable for Export.

**1 Gross 7/-**  
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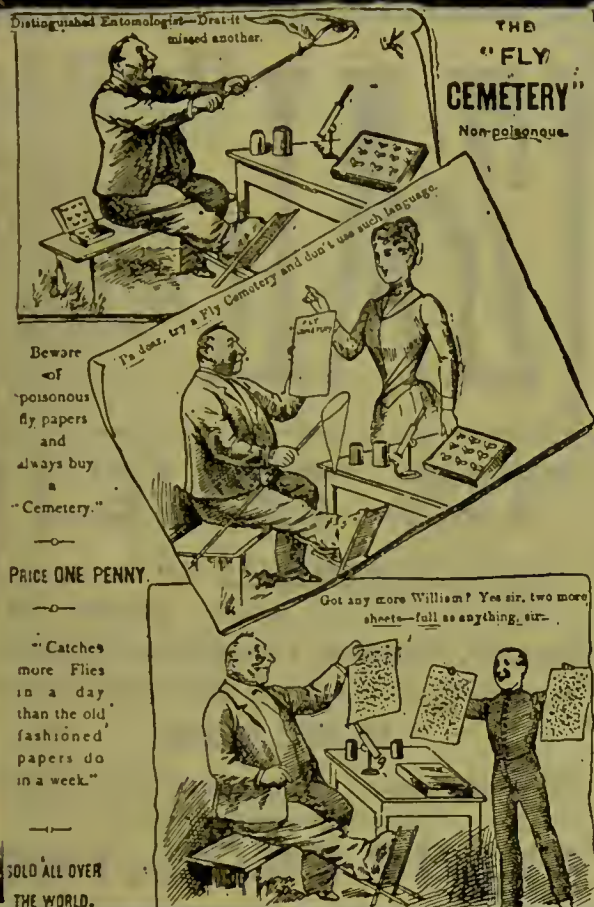
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Sole Manufacturer, JOHN H. SMITH, NEWARK-ON-TRENT.  
Telegrams—"SMITH NEWARK."



(TESTIMONIAL)

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Yours faithfully,

THOMAS KEATING.

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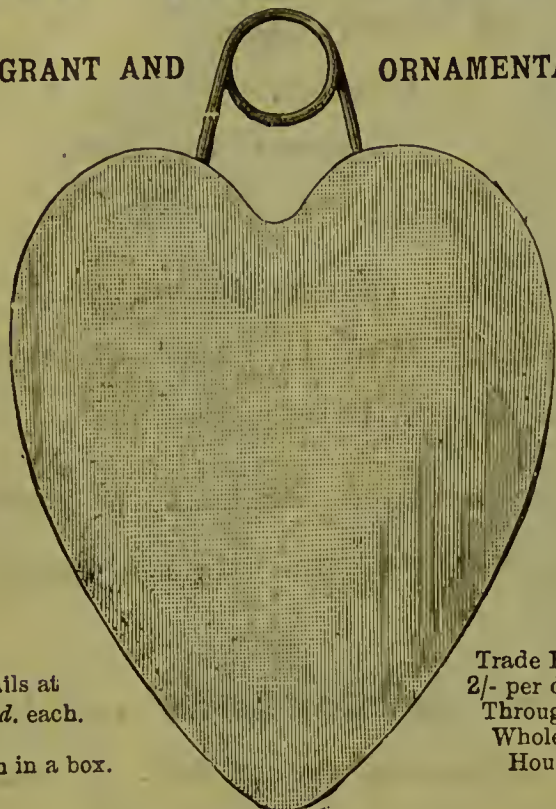
## KEATING v. WRIGHT (NEWCASTLE).

MR. JUSTICE NORTH, on the 14th February this year, in giving Judgment, said: "There was no difference in principle between verbal representations and representations in writing for the purpose of passing off goods of one person as those of another. . . . He therefore granted an Injunction to restrain the Defendant from selling or offering for sale, as Keating's Insect Powder, powder not made by the Plaintiff, and ordered the Defendant to pay the costs of the action."



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**SANITARY HEART**

FRAGRANT AND ORNAMENTAL.



Retails at  
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Each in a box.

Trade Price  
2/- per doz.  
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Disinfectants  
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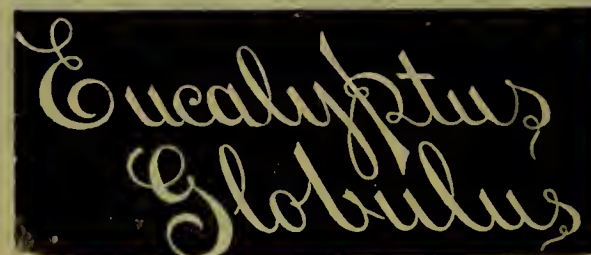
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with kindred bodies, therefore please specify  
"DOWNIE'S" in ordering through any whole-  
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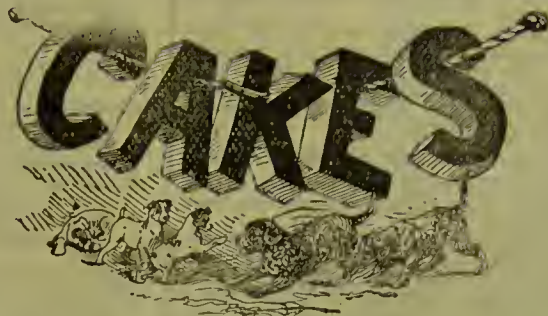
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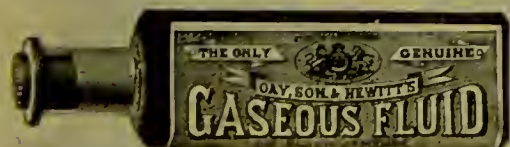
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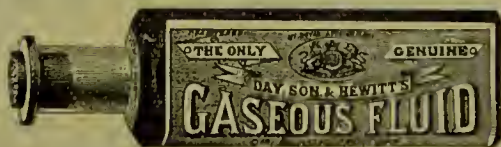
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Used as Laudanum for parturition in Mares, Cows, and Ewes, when there is great pain exhibited with feverish symptoms. Highly beneficial for Inflammatory Colic or Enteritis, and for severe forms of Diarrhœa.

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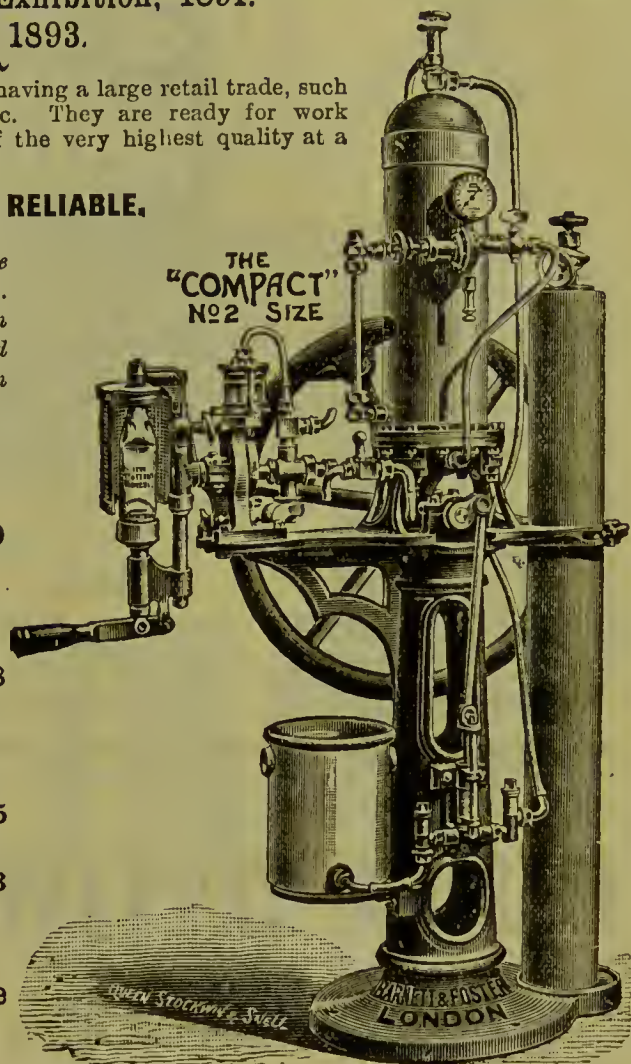
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Manufacturing Chemists,  
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## "FRANZ JOSEF" WATER.

NATURAL PALATABLE HUNGARIAN  
PURGATIVE.



The favourite prescription of the Medical Profession, as more palatable and reliable than any other Water for cases of Habitual Constipation, Hepatic Congestion, Obesity, Catarrh of the Stomach, Atony of the Bowels, and especially for Women before and after Accouchement.

Of all Chemists at 1/6 and 2/-.

The Genuine Label has Black lettering with Blue Border on White Ground

Sole Agents—BURROUGHS, WELLCOME & CO., HOLBORN VIADUCT, LONDON; and of INGRAM & ROYLE, and all Wholesale Druggists and Mineral Water Dealers.



# **POTTER'S**

---

The Best in the Market.

## **HERB BEER**

---

Makes a Splendid Botanic Beer.

IMPROVED  
FLAVOUR.

## **EXTRACT**

---

KEEPS GOOD IN ANY CLIMATE.

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Price **3/6** per Dozen, **39/-** per Gross.

*Show Cards, Counter Bills, &c., with all orders.*

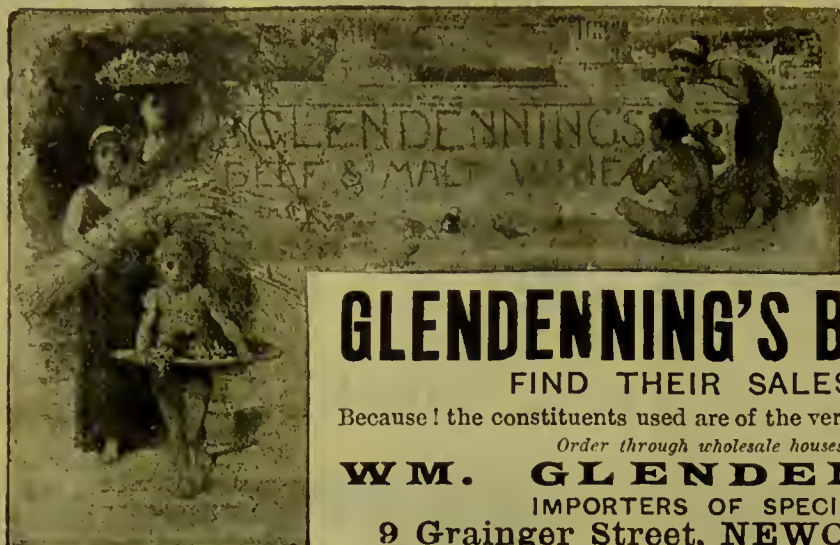
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# **POTTER & CLARKE,**

Wholesale and Botanic Druggists,

**5, 6, & 7 RAVEN ROW, LONDON, E.**





# QUALITY

## BRINGS ITS OWN REWARD.

### THOSE WHO SELL

## GLEN DENNING'S BEEF & MALT WINE

FIND THEIR SALES INCREASE. WHY?

Because! the constituents used are of the very finest quality, and the public are finding it out.

Order through wholesale houses or direct from Sole Proprietors—

**WM. GLEN DENNING & SONS,**

IMPORTERS OF SPECIAL WINES FOR INVALIDS,

9 Grainger Street, NEWCASTLE-ON-TYNE.

Established  
1867.

BEWARE OF IMITATIONS WITHOUT THE

# TOWER TEA

HIGHEST AWARD, PARIS, 1889.

Analysts by the "LANCET," December 20th, 1890:—

"We have submitted to examination the Teas of the Great Tower Street Tea Company (Limited). They all yield liquors which are generous to the taste, and of full strength and vigour. The results of our analysis indicate the purity and genuineness of the samples."



PRIZE MEDAL, PARIS, 1889.



REGISTERED TRADE MARK.

Where Vacancies exist, Agencies are appointed by

## THE GREAT TOWER STREET TEA CO., LIMITED

5 JEWRY STREET, LONDON, E.C.

# "COCA-TONIC-CHAMPAGNE"

(LAURENT-PERRIER).

The only combination of high-class Champagne with Coca Leaf Extract, by actual Champagne Growers. Well matured, free from Acidity, and absolutely without Sugar or added Alcohol.

Prices:— $\frac{1}{2}$ -Pints, 24/-; Pints, 45/-; Quarts, 84/- per dozen.

Sole Consignees, HERTZ & COLLINGWOOD, 4 Sussex Place, Leadenhall St., London; and of INGRAM & ROYLE.

## PURE ORANGE WINE

(VINUM AURANTII, B.P.), prepared in strict accordance with the Formula of the British Pharmacopœia.

MOST SUITABLE BASIS FOR QUININE AND OTHER MEDICATED WINES.

A. MILLAR & CO., DUBLIN; and 6 LIME STREET, LONDON, E.C.

Or of H. J. ROYDANT & CO., 75 Acre Lane, BRIXTON, S.W.

HIRST, BROOKE & HIRST (LIM.), LEEDS,

Manufacturing Chemists and Wholesale Druggists, Manufacturers of

## ORANGE WINE

Of Finest Flavour and Quality, and specially suitable for the Preparation of Orange Quinine Wine.



**MEMORANDUM.***From***COLEMAN & CO., LIMITED,**

MANUFACTURING

*Chemists and Wine Merchants,*

BANK PLAIN,

AND

**"WINCARNIS" WORKS, LOWER WESTWICK STREET,****NORWICH.**

---

**To the CHEMISTS and DRUGGISTS of ENGLAND and WALES.**

---

DEAR SIR,

For some time past we have prepared a "**WINCARNIS**," with British Wine, in order that the holders of a Sweets License might be able to sell the preparation. We have recently very much improved this manufacture, and we can now confidently recommend it. It often happens that there is a difficulty in obtaining a Foreign Wine License, and a Sweets License is more readily granted by the Magistrates than a Foreign Wine License.

It is our wish that Chemists generally should stock our preparation, and Medical Men prefer to recommend their patients to obtain the Wincarnis of Chemists than sending them to other traders. We are therefore willing, in order to facilitate matters, provided you will send us an order for One Dozen 2/9 size and One Dozen 4/6 ditto, to pay for a Sweets License, if you do not already hold one, and this License will enable you to sell any kind of British Wine, such as Orange, Ginger, &c.

The Wincarnis "with Quinine," and "Non-alcoholic," can be sold without a License, but it is far preferable to sell the Wincarnis made with British Wine, unless you hold a Foreign Wine License and can sell the Wincarnis made with Foreign Wine.

We are now advertising extensively in the United Kingdom, and a great number of Medical Men are daily recommending Coleman's "**Wincarnis**."

Yours faithfully,

**COLEMAN & CO., Limited.**



EIGHT PRIZE MEDALS AWARDED.

# GOODALL'S HOUSEHOLD SPECIALITIES.

## YORKSHIRE RELISH.

Most Delicious Sauce in the World. Bottles, 6d., 1s., &amp; 2s. each.

## GOODALL'S BAKING POWDER.

The Best in the World. 1d. packets; 6d., 1s., 2s., and 5s. Tins.

## GOODALL'S EGG POWDER.

One 6d. Tin is equal to 25 Eggs. In 1d. packets; 6d., 1s., and 5s. Tins.

## GOODALL'S CUSTARD POWDER.

Delicious Custards without Eggs. In Boxes, 2d., 6d., &amp; 1s. each.

## GOODALL'S BLANCMANGE POWDER

Delicious Blancmange in a Few Minutes. Boxes, 6d. and 1s. each.

## GOODALL'S QUININE WINE, B.P.

Best Tonic yet Introduced. Bottles, 6d., 1s., and 2s. each.

## GOODALL'S GINGER-BEER POWDER.

Makes the Best Ginger-Beer. Packets, 3d. and 6d.

## GOODALL'S BRUNSWICK BLACK.

For Painting Stoves, Grates, Iron, Tin, &amp;c. 6d. and 1s. Bottles.

## GOODALL'S LAVENDER WATER.

Rich and Lasting Perfume. Bottles, 1s., 2s., and 5s. each.

## GOODALL'S PLATE POWDER.

For Polishing and Cleaning all Metals. Boxes, 6d., 1s., and 2s.

## GOODALL'S JELLY SQUARES.

Make a Delicious and Nutritious Jelly. In  $\frac{1}{2}$ -pint, 1-pint, and Quart Boxes, 3d., 6d., and 1s. each.

PROPRIETORS—GOODALL, BACKHOUSE &amp; CO., LEEDS.

# PATENT MEDICINES AND DRUGGISTS' SUNDRIES.

Monthly Price List of Patent Medicines, Druggists' Sundries, &amp;c., will be sent post free on application to

GOODALL, BACKHOUSE &amp; CO., LEEDS.

# MASON & CO.'S, LIM. PREPARATIONS.



TRADE MARK.

Essence of Beef  
Essence of Chicken  
Essence of Yeal  
Essence of Mutton  
Beef Tea Jelly  
Concentrated Beef Tea  
Meat Lozenges

Meat Juice  
Malted Food for Infants  
Extract of Malt  
"O.K." Bouillon  
"O.K." Sauce  
"O.K." Relish  
"O.K." Curry Powder

SEND FOR PRICE LIST.

417 &amp; 419 KING'S ROAD CHELSEA, LONDON, S.W.

**"A CAPITAL IDEA"!!**

Said friend JONES, the GO-AHEAD CHEMIST. "I'VE DOUBLED MY TRADE last year since I commenced packing all my customers' prescriptions in Glover's small wood boxes."

And JONES CHUCKLED!!

**WOODEN BOXES**  
ALL SIZES  
MADE TO ORDER

TELEPHONE 4283  
ELECTRIC  
GLOVER'S HATCHAM  
TRADE MARK

PRICE 1s. 6d. per doz. nests of 6 boxes, planed and hinged, from 5" x 2 1/2" x 1 1/2" to 9 1/2" x 6 1/2" x 4 1/2". Nests of 6 for Bottles, 4 oz. to 16 oz., at same price. Single nest, 1/6.

**"CAPITAL, INDEED"!!!**

Said the Colonial Shipper. "Those light nested boxes, shipped in cases (each containing 1-gross nests), are just what is wanted, and I am getting repeat orders doubled. We are all indebted to the Makers, Messrs. C. H. GLOVER & CO., of Hatcham Sawmills, Ormside St., Old Kent Road, LONDON, S.E."!!

# JAMES BOULTON & CO., LIM.

CHEMICAL MANUFACTURERS,  
CRAYFORD MILLS, STRATFORD, LONDON.

Manufacturers of the Finest Steam-made

## GRANULAR EFFERVESCENT PREPARATIONS.

ACETIC ACID. ACETATE POTASSIUM.  
SPIRIT AND VINEGAR COLOURING.  
GLYCERINE FRUIT ESSENCES, &cSole Proprietors and Manufacturers of  
THE NEW PRESERVATIVE:  
**SEMPER-DULCIS OR EVER-SWEET,**  
For Milk, Cream, Butter, Sausages, &c., &c.**FINEST BUTTER-COLOUR (Buttercup Brand)**  
SEND FOR QUOTATIONS.



# PETER TYRER'S SAUCES

WORCESTER, READING, HARVIE, YORKSHIRE, AND "BOROUGH" KETCHUP.

SILVER MEDAL.

			Per gross.	Extra quality.		Per gross.	Extra quality.
14. Sample Bottles, dozen parcels	..	..	5/3	..	5/3	1/2 Bottles, flat or round, reputed half-pints	.. 16/-
	..	..	5/9	..	6/9		.. 28/-
14. Giant " 1/2-gross boxes	..	..	5/8	..	8/8	1 Pint "Imperial", round stoppered bottles	.. 52/-
" " dozen parcels	..	..	7/-	..	9/-	12 1/2-Gallon Casks (casks free)	.. each 20/-
" " 1/2-gross boxes	..	..					.. 32/-

**ROYAL CAFE SAUCE, a Rich Fruity and Exquisite Flavour.**

Square Glass Stoppered Bottles, containing nearly 1/2-pint Imperial, 42/- per gross. Sample Bottles at 7/- per gross.

**MANUFACTORY — 30 SOUTHALL PLACE, LONG LANE, BOROUGH, LONDON, S.E.**  
CHIEF SCOTCH AGENCY — West Nile Street, GLASGOW.

# CHAMPION'S

## VINEGAR

COMMANDS A PREFERENCE OVER  
ALL OTHERS.

WORKS { Corner of Old Street } LONDON.  
and City Road, }

ESTABLISHED OVER 200 YEARS.

**NEEDS NO GUARANTEE.**

**DE CARLE'S**

# RIPE FRUIT DRINKS

OR

# SOLID FRUIT JUICES

WERE AWARDED

**GOLD MEDAL AND DIPLOMA FOR EXCELLENCE**

At Norwich and East of England Trades Exhibition.

The above are a capital Selling Line for Summer Trade, yielding good Profit. Free Samples, Showcard, and Handbills supplied with every order.

FULL PARTICULARS OF

# DE CARLE & SON, Norwich



# THE SPECIAL ATTENTION OF CHEMISTS

IS DRAWN TO THE FOLLOWING:—

**LINSEED, LIQUORICE, AND CHLORODYNE COUGH LOZENGES.**

**A HANDSOME COUNTER MAHOGANY SHOW CASE**

Given to any Chemist buying 1 cwt. of above Lozenges. Price 1/- per lb. net.

## GIBSON'S VOCAL LOZENGE

**"TOP NOTE PRODUCERS."**

The immensely increasing demand for these Lozenges, and their wonderful popularity, is entirely due to their intrinsic merits, not only as producers of a fine clear voice, but as an effectual remedy for all Chest Affections. Sore Throats, arising from cold, seem to disappear as if by magic; Tickling in the Throat or Hoarseness is removed by allowing a few Lozenges to gradually dissolve in the mouth; indeed, Debility and Weakness of the Vocal Organs are unknown to those who regularly use these valuable Lozenges. Sold in 1/1½ and 2/9 Boxes.

## CHERRY BLOSSOM LOZENGE,

The most delightful and delicately perfumed Lozenge ever produced; have an immense sale.  
*With 4 lbs. of these Lozenges we give one of Mellin's Patent White-glass Silver-top Screw-stoppered Bottles.*

## VOICE AND THROAT LOZENGES, FOR SINGERS AND PUBLIC SPEAKERS.

## DIGESTIVE DINNER TABLETS,

Composed of Bismuth, Cardamom, Soda, Rhubarb, Ginger, &c.

## CHOCOLATE WORM CAKES,

Very palatable and unusually attractive.  
Packed in Tins, each containing 3 doz., 6 doz., or 12 doz. Cakes. Retail at One Penny each.

## Sugar Worm Cakes,

Contain Calomel, Jalap, and Santonine (flavoured with Raspberry), are palatable and very effective.  
As they will keep in any climate, a steadily increasing demand is made for them for EXPORT.  
Put up in 3-doz., 6-doz., and 1-gross Tins. [1]

Indents from abroad, marked "GIBSON," may be sent to any Wholesale Drug or Shipping House in the Kingdom.

Price Lists sent on application to

**ROBERT GIBSON & SONS, CARLTON WORKS, MANCHESTER.**

AND

**NO. 1 GLASSHOUSE YARD, ALDERSGATE STREET, LONDON.**



Telephone Number, 1852.

Telegraphic Address—CHEMICUS LONDON.

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Lorenz, H.  
Morris & Gallard (Salts)  
Pickard, W. & Co.

## ACIDS

Boulton, J., &amp; Co., Lim.

## ADVERTISING SPECIALITIES

Caepar & Co., Lim.  
Corsan, J. R.  
Sears, F. W.

## AERATED MINERALS

Apollinaris Co.  
Bangor City & North Wales Co.  
Barnett & Foster.  
Burroughs, Wellcome & Co.  
Chemists' Aerated Waters Association, Lim.  
Hills & Son (Ruthin)  
Franz Josef  
Aldis & Co., Lim.  
Ingram & Boyle  
Jewsbury & Brown  
Johannis Co.  
Levico Water  
Kinmond & Co.  
Mills & Co. (Bourne)  
Oberbrunn  
Putz, F. J., & Co.

## BITTO PLANT

[See SYNOPSIS AND ESSENTIALS.]

Barnett & Foster  
Bratby & Hinchliffe, Lim.  
Evans, Sons & Co.  
Eylands, Dan, Lim.  
Tyrer, Hayward, & Co.

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Australian Drug Co.  
Bolsey  
Kemphorne, Prosser & Co.  
Lennon, B. G., & Co. (N.E.)  
Peake, Allen & Co.  
Prosser, Taylor & Co.  
Soul, W. H., & Co.

## ALKALOIDS

Howards & Sons (Cinechena)  
Macfarlan, J. F., & Co.  
Smith, T. & H., & Co.

## AMMONIA

May & Baker, Lim.  
White, A., & Sons  
Woolley, Sons & Co.

## APPARATUS

Bennett, Sons & Shears  
Berend, C., & Co.  
Christy, T., & Co.

## BAKING POWDER

Goodall, Backhouse &amp; Co.

## BANDAGES

Bailey, W. H., & Son  
Robinson & Sons  
Schntze, F., & Co.  
Wood, Vincent

## BATH &amp; FRESH

## GLOVES

Barclay & Sons, Lim.  
Chemists' Association, Lim.  
Maw, S., Son & Thompson  
Fattison, G. | Solport Bros.  
Wood, Vincent

## BICARB. SODA

Brunner, Mond &amp; Co., Lim.

## BISMUTH PREP.

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Hewlett & Sons  
Howards & Sons  
May & Baker, Lim.  
Symes & Co. | Tyrer, T., & Co.  
White, Alfred, & Sons

## BOOKS

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Squire, F.

## BORAX

Howards & Sons  
Mack's Starch

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Isaacs & Co.  
Johnson & Jorgensen  
Kilner Bros.  
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Maw, S., Son & Thompson  
Pothe, H., & Co.  
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Robinson & Sons  
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Evans, Sons & Co.  
Kent, G. B., & Sons

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Berend, C.

## BUTTER OIL, &amp; CO.

Boulton, J., & Co., Lim.  
Crawshaw & Co.  
Crook, Walter J. (Preservative)  
Tomlinson & Hayward

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Blyton, Astley & Co.  
Jackson, T. | Kaines & Co.  
Warwick Bros.

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Lloyd, T. Howard, & Co.  
Lofthouse & Saltmer  
Parke, Davis & Co.  
Richardson, John, & Co. (Leicester), Lim.  
Robertson, J., & Co.  
Warwick Bros.

## CARBOLIC ACID

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Wandsworth Chemical Works, Lim.

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Harker, Stagg & Morgan  
Moss, J., & Co.  
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Allen & Hanburys  
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Boehm, Fredk.

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Wood, Vincent

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Government Sanitary Co.  
Hobden, W. G.

## NATIONAL CHEMICAL CO.

## CHLORODYNE

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Davenport (Brown's)  
Freeman, R. (Ezors)  
Towie, A. K., & Son

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Richardson, J., & Co., Lim.  
Robinson & Co.  
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Woolley, Sons & Co.  
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Isal

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Newberry, F., &amp; Sons

Quelch, H. O.

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 S.V.R. and Methylated Spirit at lowest present prices.

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IN ENAMELLED TINS, PERFORATED LIDS.

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For Destroying Weeds, Moss, &amp;c., on Garden Walks, Carriage Drives, Roads, Meadows, &amp;c.

We desire to point out the special advantages which the sale of our "Acme" Weed Killer affords the Trade.

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Trade and Export Terms on application. The most Liberal Terms to the Trade.

RETAIL PRICES.—In 1 and 2 gallon tins, 2/- per gallon (tins included); in 5-gallon drums 1/6 per gallon; 10, 15, and 20 gallons, 1/4 per gallon; in 40-gallon casks, 1/4 per gallon.

If desired, we can supply the "Acme" Weed Killer double strength, 1 gal. to be mixed with 50 gals. of water. RETAIL PRICES:—1 and 2 gal. tins, 3/- per gal. (tins included); 5 gals., 2/6 per gal.; 10, 15, and 20 gals., 2/3 per gal. Carriage paid on 5 gals. and upwards.

TESTIMONIALS received from Mr. HEAD, Crystal Palace; Mr. IRWIN LYNCH, Cambridge Botanic Gardens; and others.

THE "ACME" WEED KILLER, FOR CHEAPNESS AND EFFICIENCY HAS WON FOR ITSELF A NAME FAR ABOVE ALL OTHERS.

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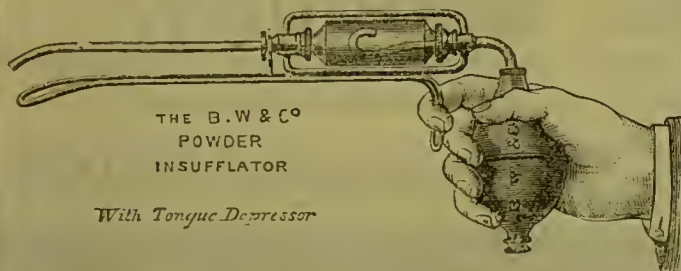


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## THE NEW B., W. & CO. POWDER INSUFFLATOR (PATENT).

This new Instrument presents conspicuous advantages over all the old forms. It is neat, light, highly finished, and altogether the most satisfactory form yet offered for the application of dry powders by insufflation to the nasal and oral mucous surfaces, and to sores, abscesses, &c., on the outer skin.

The advantage of having interchangeable cylinders to hold different powders is one which will be greatly appreciated in practice. The delay in emptying and refilling old form reservoirs—not to speak of the great difficulty, frequently met with, in dispelling the unpleasant odour of a preceding insufflation (*ex. grat.* Iodoform)—was an objection levelled at insufflators of an earlier type. The exchange of one powder for another (such as is often desirable either in the same or in a different case) is the work of a moment, and there is not the slightest risk of the character of one insufflation being affected by that of another.

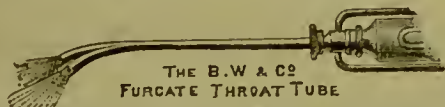


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With Tongue Depressor

It is therefore recommended that practitioners should provide themselves with at least two *extra* cylinders in order that they may have more than one formula for insufflation available for instant use.

As will be seen from the sketch, the method of handling the insufflator is natural and easy, so that the operator is enabled both to hold the instrument and to bring about delivery of the powder with one hand, thus leaving the other hand free—a very appreciable advantage. Again, each instrument is provided with two forms of delivery tube (one straight and the other curved) which are easily and quickly exchangeable. A very effective



THE B. W. & CO  
FURCATE THROAT TUBE

attachment for depressing the tongue completes the instrument. It is to be noted that the tongue depressor as designed for use in connection with this insufflator is of a unique pattern and easily detachable.

In accordance with a suggestion from Dr. Brownlow Martin (who speaks highly of the new instrument in his recent work, "Diphtheria, and its treatment by Magnesium Sulphate") we have introduced an improved tube having a furcate end, the advantage of which will be at once obvious to medical practitioners, the insufflation being delivered in two nebulae proceeding at an acute angle.

The B., W. & Co. Powder Insufflator, with one Cylinder	10/-
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The B., W. & Co. Furcate Throat Tube .. .. .	2/-

## ZYME PEPTONISING POWDERS,

Which are composed of Zymine and the proper proportion of Sodium Bicarbonate, are supplied in boxes of 12 tubes each, the contents of each tube being sufficient for the rapid and thorough peptonisation of various forms of Invalids' diet—milk gruel, jellies, custards, &c. Full directions are given with each box, so that the most inexperienced attendant may easily carry out the process.

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This Feeding Bottle differs from all others in the fact that a thermometer which instantly registers the temperature of the food is embedded in the glass. It is also graduated in ounces.

The Thermo-Safeguard Feeding Bottle enables the nurse to ascertain at all times the temperature of the food given to the child. The bottle is made of flint glass of the most approved shape, and has no angles in which the milk can coagulate. It has the further advantage (since the bottle is marked in ounces) of giving a register of the exact amount of food taken, and thus tends to avert the evil of overfeeding.

"The bottle has a great deal to recommend it."—*British Medical Journal*.

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## DIURETIN (KNOLL).

This drug has been before the medical profession for some time, and has given decided satisfaction in the treatment of dropsy, especially when the dropsy is attended by functional diseases of the heart. It is soluble in warm water, and is incompatible with alkalies and acids. Diuretin for this reason is frequently prescribed in "Tabloids" 5 grs. each. These are directed to be dissolved in half a tumbler of warm water, and the solution to be taken as a draught. Diuretin is also supplied in powder for convenience in dispensing, and should be kept hermetically sealed.

Supplied to the trade in 1-oz. bottles at 4/4 each. In quantities of 100 oz. and upward, 4/2 per doz. Diuretin "Tabloids" supplied in bottles, 30/- and 84/- per dozen bottles.

## SACCHARIN AND SACCHARIN "TABLOIDS."

Saccharin is sent out in the form of Soluble Saccharin and Saccharin "Tabloids," both of which dissolve easily and freely in water and possess an exquisitely delicate and pleasant sweetening flavour.



They thoroughly satisfy the taste for sweet things, and yet are in no way allied to sugars or starchy foods. While on the one hand they are not a nutriment, on the other hand they are not poisonous. They are as innocuous and palatable as their sweetening power is great and complete. When taken into the system Saccharin is not assimilated, and in thirty minutes some of it appears in the urine unchanged.

The "Tabloids" are portable and of the greatest convenience to those away from home during the day. One or two tiny "Tabloids" of Saccharin added to a cup of tea, coffee, or cocoa—in lieu of as many lumps of sugar—will impart to it a sweet and delicate flavour.

Soluble Saccharin supplied to the trade at 4/6 per oz., or in 1/2 oz. bottles, with scoop, at 14/- per doz. Also in "Tabloid" form, in bottles containing 100 and 200, at 7/- and 12/6 per doz.

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This is a perfect preparation for Toilet and Nursery use. It may be relied upon as being absolutely non-poisonous, free from odour and from all possible irritating material. The properties of Dermatol for its soothing effect in chafed and irritable conditions of the skin, its drying and antiseptic character, are well known and recognised, and when this fact is considered, the Dermatol Dusting Powder, which is a combination of Dermatol with pure rice starch powder, will readily commend itself as a high-class toilet preparation.

Dermatol Dusting Powder supplied to the Trade in boxes containing 50 grammes (about 1½ oz.), at 8/- per dozen boxes.

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**DIKE'S PEPSIN** has been critically examined by more than one "undoubted English authority," who have certified to the accuracy of the claims made for it.

**DIKE'S PEPSIN** has provoked the jealousy of a firm of very esteemed competitors, who make a very good Pepsin, truth to tell, but who cannot reproduce DIKE'S.

SEND FOR A FREE SAMPLE. IT WILL DO ITS OWN TALKING!

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